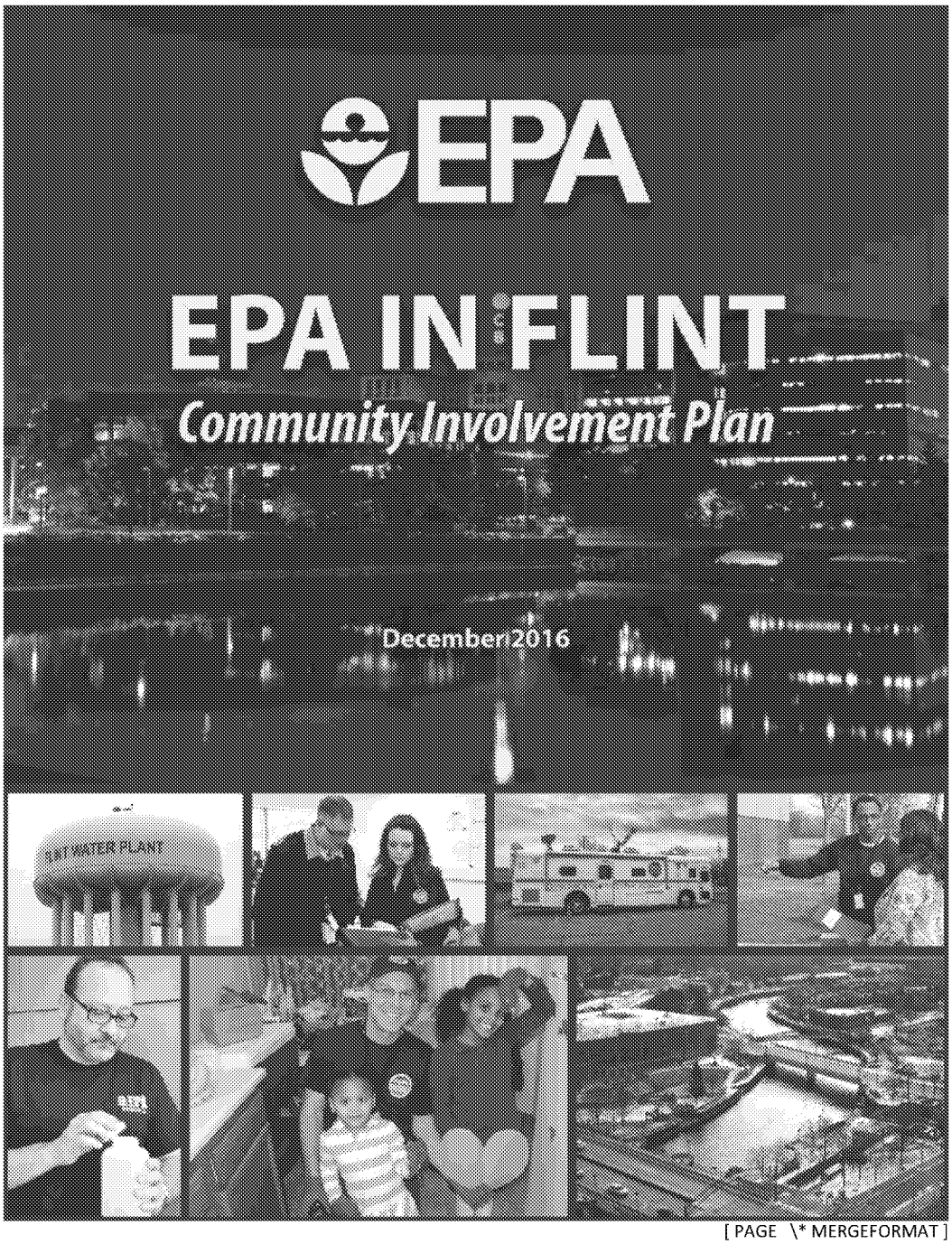
EPA
EPA IN FLINT
Community Involvement Plan
December 2016

INTRODUCTION

Describes the purpose of this CIP and presents EPA's community involvement and outreach objectives.

COMMUNITY CONCERNS AND QUESTIONS

Summarizes what community members are concerned about, the questions they asked and what they told EPA throughout the water crisis.

COMMUNITY INVOLVEMENT/OUTREACH GOALS AND ACTIVITIES

Highlights EPA's community involvement goals, outreach and response activities to keep residents and local officials informed and involved and to assist the community with the water contamination as well as other local environmental issues.

THE COMMUNITY

Provides a brief summary of the composition and history of the City of Flint and Genesee County.

HISTORY

Description and history of water contamination and recovery activities.

APPENDICES

Appendix A – Glossary – Initials – Acronyms: Definition of key words, initials and acronyms (words are in **bold** throughout the document).

Appendix B – Community Resources: Possible meeting locations.

Appendix C – List of Contacts: List of federal, state, and local agencies and interested groups.

Appendix D – Fact Sheets: EPA's fact sheets on lead, chlorine and Flint-specific issues.

Appendix E –. Federal Support: Congressional overview of the federal support for the Flint Water Crisis Response and Recovery.

INTRODUCTION

DTN: 1191 **; CIP and presents EPA's community involvement and outreach objectives.**

The U.S. Environmental Protection Agency prepared this **Community Involvement Plan** to inform, engage, support and respond to the **community** affected by the drinking water **contamination** as well as other environmental issues in Flint, Michigan. Our **community involvement** effort is committed to promoting effective and meaningful communication between the **public** and the Agency. We want to make sure the community's current concerns and information needs are considered in all response activities.

This **CIP** was prepared to direct community involvement, outreach and environmental response activities and to support drinking water recovery efforts in the City of Flint. We used several information sources to develop this plan, including research, meetings and discussions with community members and information gathered during community interviews. Interview teams made up of members from Michigan Department of Health and Human Services, Genesee County Health Department, Genesee Health System and the University of Michigan–Flint conducted interviews with community members on May 17 - 19, 2016. The teams were trained by the **Centers for Disease Control and Prevention**, or **CDC**. A total of 182 people were interviewed.

(*Words in **bold** are defined in Appendix A.*)

EPA's communication objectives:

- Assist the public in understanding all community outreach and response activities associated with the drinking water contamination and other environmental issues and the community's role in the activities.
- Give the public accessible, accurate, timely and understandable information about all of the outreach and response activities.
- Ensure adequate time and opportunity for the public to give informed and meaningful input.
- Reflect community concerns, questions and information needs.
- Respect and fully consider public input throughout outreach and response activities.

This CIP describes EPA's plan for addressing concerns and keeping residents informed and involved in outreach and response activities and the drinking water recovery efforts. We will use this document as a guide to involve and communicate with residents, businesses, community partners and the local governments of the City of Flint and Genesee County.

If you are interested in submitting comments or have questions or suggestions concerning this CIP, please contact:

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"Meeting with and talking to residents form the foundation for a positive and productive relationship between the community and the EPA." Diane Russell, EPA CIC

Brief overview of Flint drinking water contamination

On April 25, 2014, the City of Flint changed their municipal water supply source from the Detroit-supplied Lake Huron water to the Flint River. The switch in the water source resulted in the corrosion of the water distribution pipes and **leaching** of **lead** and other **contaminants** into municipal drinking water. Lead toxicity can affect every organ system and results in neurological, renal, hematological, endocrine, gastrointestinal, cardiovascular, reproductive and developmental effects, including mental impairment and growth failure. In children, lead remains a common, preventable, environmental health threat. Children are more susceptible than adults to the adverse effects of lead exposure, due to hand-to-mouth actions, higher physiological uptake rates, and growing bodies. On September 24, 2015, a Hurley Medical Center researcher released results of a study that demonstrated an increased incidence of elevated blood-lead levels in children who were residents of Flint existed after the water source change. Subsequently, the City of Flint issued a lead advisory on September 25, 2015 that advised residents to use water only from the cold water tap for drinking, cooking and making baby formula. On October 1, 2015, the Genesee County Board of Commissioners and Genesee County Health Department declared a public health emergency and advised residents of Flint not to drink the municipal water unless it had been filtered through an **NSF International** approved filter certified to remove lead that meets **American National Standards Institute**, or **ANSI**, standard 53. On October 15, 2015, funding was authorized to switch the municipal water source back to Detroit-supplied Lake Huron water. On January 16, 2016, President Obama declared a state of emergency for the City of Flint and Genesee County.
Source: CDC Community Assessment for Public Health Emergency Response, July 2016
(*See the section called "The Site" for more detailed information.*)

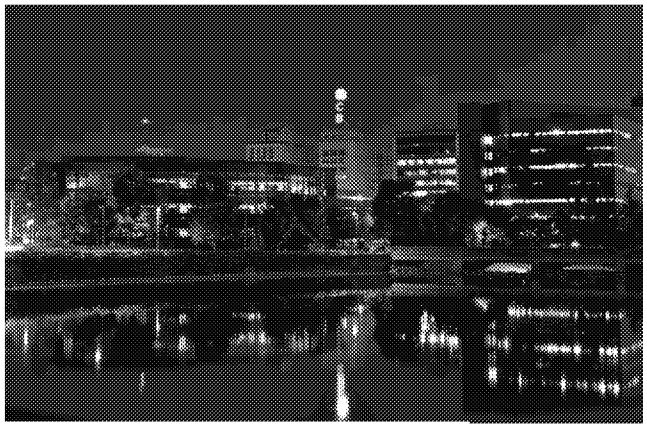
Important:
The expiration of the emergency declaration on August 14 2016 is not affecting EPA's timeline on the ground in Flint. The Agency is committed to being in Flint until the city is in compliance and the water system is fully restored.

The CIP is a working document that will evolve as the investigation and cleanup process continues and input is received from the community. It is intended to be flexible, adaptable and used as a guideline for our communication with the community.

Community Engagement is Essential for Success

Ongoing input and involvement by the community is essential to our efforts to provide effective **community engagement**. We have learned that the Agency's decision-making ability and communication is enhanced by actively seeking input and information from the community. Community members need to be involved in outreach and response activities so that environmental issues are addressed so they best people and the environment – now and in the future.

Through our **Brownfields** program, EPA has been helping the City of Flint for several decades with its **Environmental Justice**, or **EJ**, and revitalization issues. While working with the community over the years, we learned the value of engaging and partnering with local residents, business owners, community partners and local government officials. By being closer to the community, we are able to determine the best way to respond to the community's needs. The water crisis has broadened our understanding of the value of working with the Flint community. Local residents explained their concerns: including fear of using their drinking water; health effects associated with using the water including rashes, fatigue, nausea, forgetfulness, muscle aches and joint pain; behavioral health concerns such as anxiety and stress, problems sleeping, depressed moods and trouble concentrating; and financial concerns. These and other concerns are explained in the Community Concerns and Questions section. The Agency is committed to providing support to the community to address these issues as well as to continuing to support revitalization and EJ efforts.



City of Flint.

COMMUNITY CONCERNS AND QUESTIONS

Summarizes what community members are concerned about, the questions they asked and what they told EPA throughout the water crisis

What We Heard

This section focuses on the concerns and issues that EPA heard from community members about the water crisis.

EPA deployed staff to respond to the water crisis in late January 2016. Immediately teams started interacting with the community and hearing concerns while conducting sampling home visits, community meetings and other forums. The report described below formalized much of what we heard during these response efforts.

To record community concerns about the water crisis, the Michigan Department of Health and Human Services, or MDHHS, requested the CDC to conduct a **Community Assessment for Public Health Emergency,** or **CASPER**. On May 17 – 19, 2016 interviews were conducted with over 182 community members. The CASPER interviews assessed the following:

- Household- and individual-level, self-reported behavioral health concerns
- Household access to behavioral health services, including substance abuse, mental health services and perceived barriers to access
- Self-reported physical health concerns
- Water-related resource needs and barriers to resources
- Communication with the affected community

Summary of the CASPER interviews

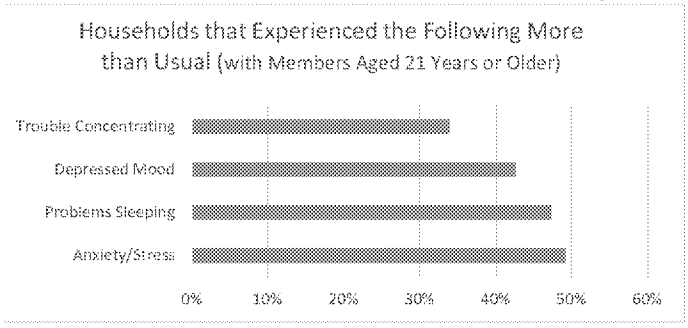
Demographics of those interviewed

The majority of interviewees identified as black (57.7 percent), white (42.9 percent) and non-Hispanic (97.6 percent). The majority of individuals (79.5 percent) have lived in the community for more than 12 years. The mean age of people interviewed was 49.4 years and 69.0 percent of those interviewed were female.

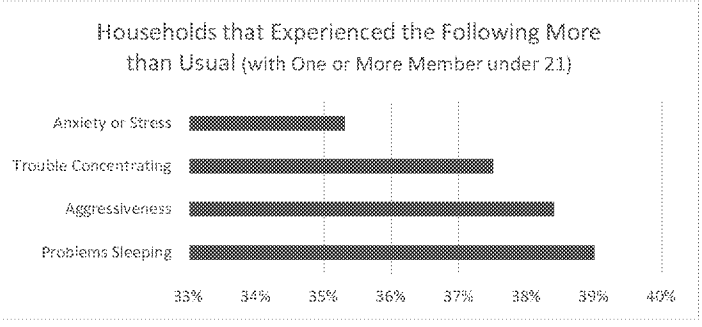
Note to readers: This section is intended to faithfully record and reflect the issues and concerns expressed to the interview teams by people interviewed. By necessity, this is a collection and summary of thoughts and observations and, in some cases, opinions. Please be cautioned that the statements contained in this section may or may not be factual and that the opinions and concerns expressed may or may not be valid.

Household self-reported behavioral health concerns

Of all households, 65.6 percent reported that one or more household members aged 21 years or older had at least one behavioral health concern more than usual since October 2015; 44.9 percent of these households perceived a need for behavioral health services. Among households with members aged 21 years or older, many reported these members experiencing the following more than usual: anxiety/stress (49.1 percent), problems sleeping (47.3 percent), depressed mood (42.6 percent) and trouble concentrating (33.9 percent). Of these households with at least one household member under 21 years, 54.3 percent reported that one or more household members aged less than 21 years had at least one behavioral health concern more than usual since October 2015; 51.7 percent of these households perceived a need for behavioral health services. Among households with members of this age range, many reported these members experiencing the following more than usual: problems sleeping (39.0 percent), aggressiveness (38.4 percent), trouble concentrating (37.5 percent) and anxiety or stress (35.3 percent). The majority of households did not report increased use of substances (i.e., nicotine, alcohol, illicit drugs or off label use of prescription or over-the-counter drugs) since October 2015. However, households reported at least one member increasing the use of nicotine products (e.g., cigarettes, e-cigarettes, chewing tobacco) (23.7 percent), alcohol (13.6 percent), marijuana (10.1 percent), prescription or over-the-counter drugs used not as directed or not their own (4.3 percent) and other illicit drugs (1.1 percent).

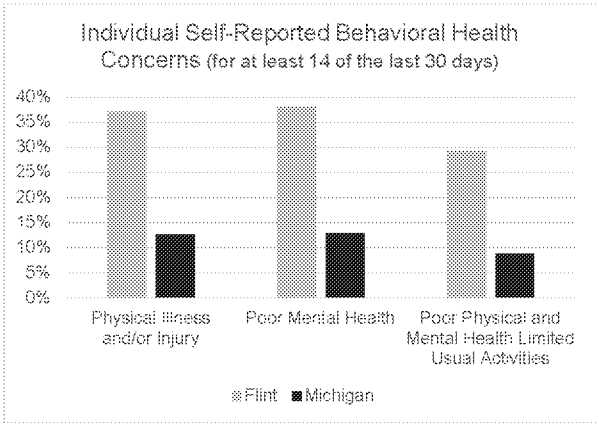


Since April 2014, 26.4 percent of households reported *a lot* of stress related to compromised health while 37.6 percent of households reported no stress related to compromised health due to the Flint water contamination. Half (50.0 percent) of households reported *a lot* of stress related to feeling overlooked by decision-makers and also feeling that the water contamination will never be fixed. Many households (41.2 percent) experienced *a lot* of fear due to the water contamination in regard to drinking or cooking with filtered tap water while 57.9 percent experienced *a lot* of fear drinking or cooking with unfiltered tap water. Also, 22.6 percent of household felt *some* fear of drinking or cooking with bottled water. The majority of households felt *a lot* of fear in bathing (55.2 percent) and brushing their teeth (55.1 percent) with unfiltered tap water.



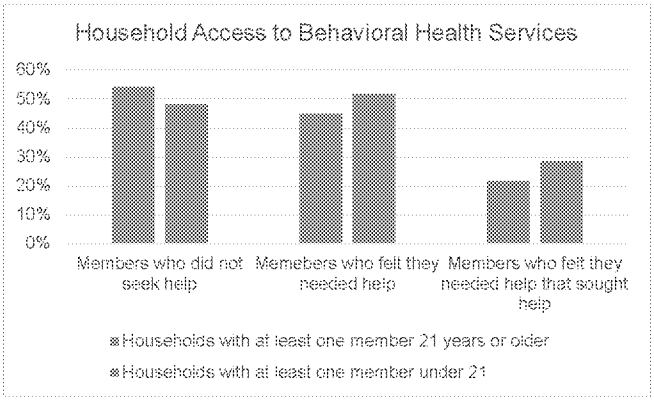
Individual self-reported behavioral health concerns

Twenty-nine percent of individuals self-reported depressive symptoms and 33.7 percent self-reported symptoms of anxiety. While 43.2 percent *never or rarely* worried or stressed about paying their rent or mortgage, 22.6 percent reported being *always or usually* stressed or worried. In regards to buying nutritious meals, 49.7 percent were *never or rarely* worried or stressed; however, 25.4 percent reported being *always or usually* stressed or worried. Approximately 37.0 percent of individuals living in the City of Flint reported having a physical illness and/or injury for 14 or more days within the last 30 days, compared to 12.6 percent as reported in a 2014 survey of 2014 State of Michigan residents conducted by the **Behavioral Risk Factor Surveillance System, or BRFSS**. In the City of Flint, 38.0 percent of individuals reported having poor mental health (e.g., stress, depression, and emotional problems) for 14 or more days within the last 30 days, compared to 12.9 percent for the total population of Michigan as reported in the 2014 Michigan BRFSS survey. In the City of Flint, 29.1 percent of individuals reported that poor physical and mental health limited their usual activities (e.g., self-care, work, or recreation) for 14 or more days within the last 30 days, compared to 8.7 percent for the total Michigan population as reported in the 2014 Michigan BRFSS survey.



Household access to behavioral health services and perceived barriers to access

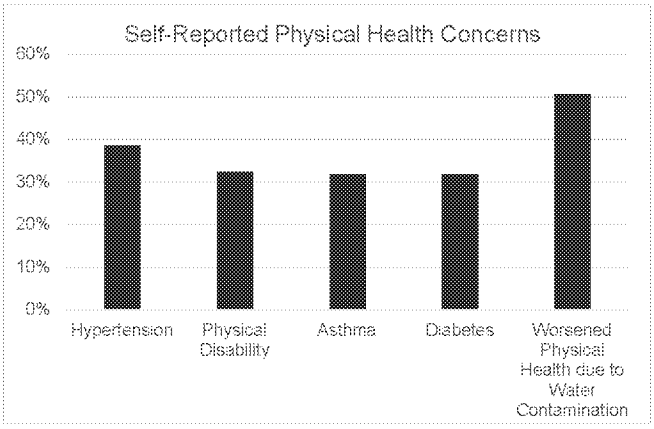
Of those households with at least one member aged 21 years or older, 54.2 percent had members who felt they did not need help, while 44.9 percent of members felt that they needed help with 21.6 percent of those members seeking out help for behavioral health concerns from a counselor, pastor/clergy member, therapist or case/social worker. Of the households with at least one household member under age 21 years, 48.3 percent had members who felt they did not need help, while 51.7 percent of members felt that they needed help. Of those households that needed behavioral health services for members aged less than 21 years, 28.4 percent sought help from a counselor, pastor/clergy member, therapist, or case/social worker. Regardless of age, among the 22.5 percent of households reporting difficulties seeking help, 47.3 percent had a hard time trusting in the healthcare system or health care providers,



29.7 percent thought services were too expensive, 25.9 percent had no transportation, 13.4 percent were disabled or homebound, 13.1 percent worried about what others would think and 11.5 percent lacked health insurance.

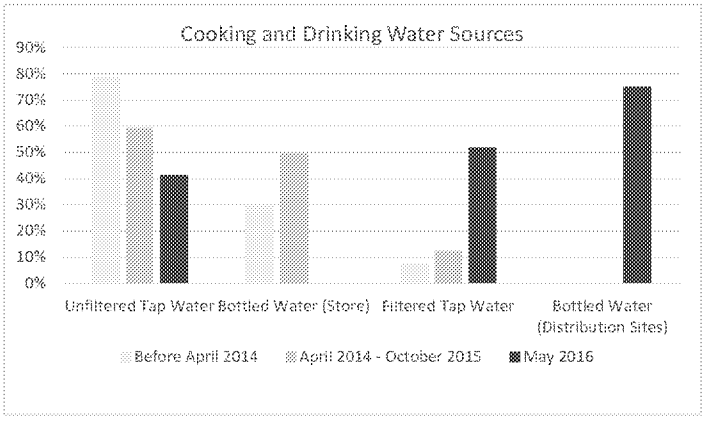
Self-reported physical health concerns

When household respondents were asked if they or a member of their household had ever been told by a healthcare professional that they had a selected list of chronic diseases, 38.6 percent reported hypertension or heart disease; 32.3 percent reported physical disability; 31.7 percent reported asthma, chronic obstructive pulmonary disease or emphysema; and 31.7 percent reported diabetes. Approximately half (50.5 percent) of households reported worsened physical health of one or more members of a household due to the water contamination. Among those households, the top physical health effects reported via open-ended responses included: skin rash or irritation (49.6 percent), hair loss (9.4 percent) and muscle aches or pain (4.9 percent).

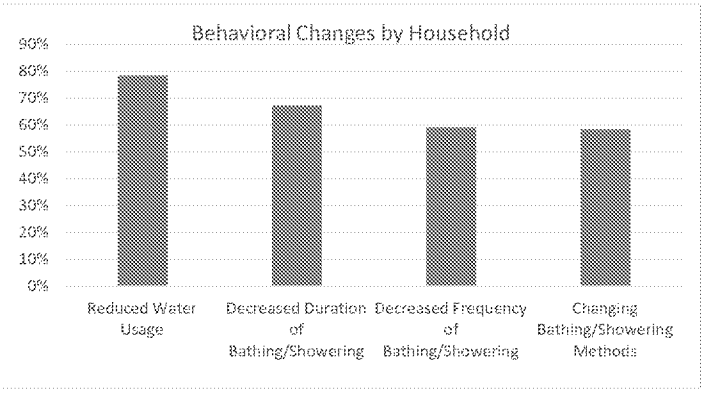


Water-related resource needs and barriers to resources

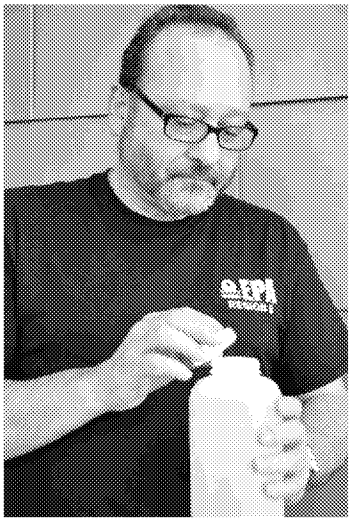
Before April 2014 (before the City of Flint changed their municipal water supply source from the Detroit-supplied Lake Huron water to the Flint River), the top three household sources of water for cooking and drinking were unfiltered tap water (78.2 percent), bottled water from the store (29.6 percent) and filtered tap water (7.5 percent). Between April 2014 and October 2015 (after the City of Flint changed their municipal water supply source, but before residents of Flint were advised not to drink the municipal water), the top three household sources of water for cooking and drinking were unfiltered tap water (59.3 percent), bottled water from store (49.7 percent) and filtered tap water (12.3 percent). Though advised not to consume unfiltered municipal tap water since October 1, 2015, of those households reporting



unfiltered tap water use, 15.0 percent of households reported use of unfiltered tap water for drinking and 20.2 percent of households reported use for cooking after that time. Also, since October 2015, the majority of households (82.7 percent) have not faced barriers in obtaining bottled water, filtered water or well water. Of the 16.9 percent of households that faced barriers, the top three barriers reported were no transportation (62.3 percent), distribution sites do not give out enough water (39.5 percent) and being disabled or homebound (25.4 percent).



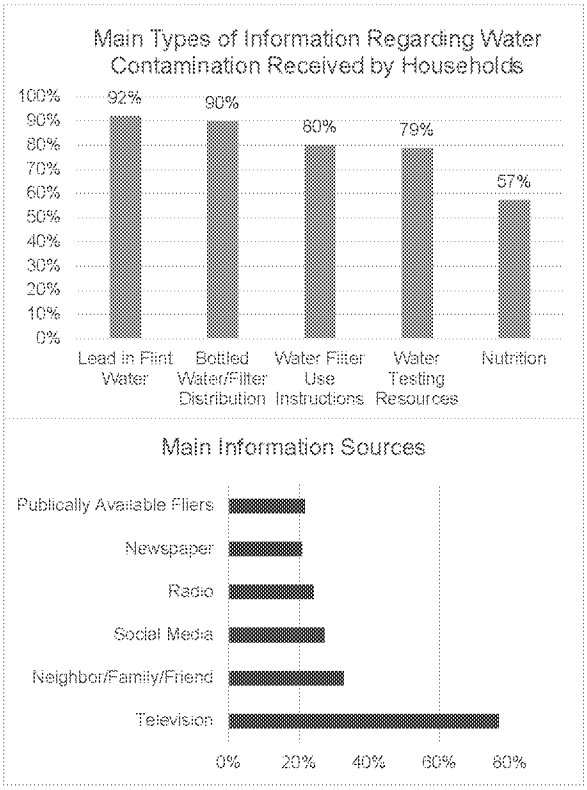
In May 2016 (at the time of interview), the top three household sources of water for cooking and drinking were bottled water from distribution sites (75.0 percent), bottled water from the store (51.6 percent) and filtered tap water (41.1 percent). If using water filters for drinking and cooking, 91.4 percent of household respondents reported having filters on the kitchen faucet and 12.6 percent on the bathroom sink. When asked about specific behavioral changes, the majority of households interviewed reported changing their behavior; 78.2 percent of households reduced water usage, 67.0 percent decreasing duration of bathing/showering, 58.9 percent decreasing frequency of bathing/showering and 58.1 percent changing bathing/shower methods altogether.

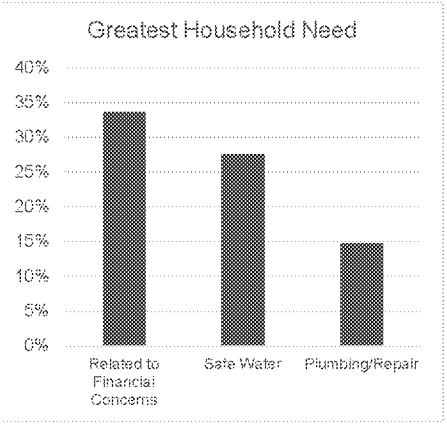


EPA takes water samples in Flint.

Communication with the affected community

The main types of information received by households interviewed regarding the water contamination included the following: lead in Flint water (92.0 percent), bottled water/filter distribution (89.7 percent), water filter use instructions (80.0 percent), water testing resources (78.7 percent) and nutrition (57.1 percent). The main sources of this information were television (76.6 percent), neighbor/friend/family (32.5 percent), social media (27.1 percent), radio (24.1 percent), newspaper (20.7 percent) and publically available information fliers (21.5 percent). The main most trusted household sources of information about the water contamination were news media (26.4 percent), Genesee County Health Department (9.3 percent), health professionals (8.6 percent), faith-based organizations (6.4 percent) and social media (5.1 percent). However, many respondents chose "Other" as their most trusted source of information (24.9 percent). Of those reporting "Other", their open-ended responses included trusted self/did not trust anyone (31.1 percent), did not trust any of the listed sources (26.9 percent) and no trust in government (9.9 percent). According to respondents, in 96.9 percent of households all members understood English.





Greatest need for households

When asked about the current greatest household need, the top three open-ended responses were related to financial concerns (33.6 percent), safe water (27.5 percent) and plumbing/repair (14.7 percent). Of those expressing financial concerns, 18.9 percent reported paying for utilities being of greatest concern.

Referral needs

Interview teams submitted referrals for additional needs or services. Needs or services were categorized as: basic needs (i.e., food, water and finances); filter needs; furniture needs; lead resources; job placement and water delivery. Participants requesting services were referred to the

Genesee Health System customer services, Genesee Health System targeted case management, Flint Cares and Michigan–211.

Source: CDC Community Assessment for Public Health Emergency Response, July 2016

Flint Drinking Water Frequently Asked Questions

Is it safe for adults to shower or bathe with Flint water? Can babies be bathed in tap water?

- Your skin does not absorb lead in water. If plain tap water has too much lead, bathing and showering is still safe for children and adults. It is safe even if the skin has minor cuts or scrapes. Never drink bathwater, and do not allow babies and children to drink bathwater. Rashes have many causes, but no medical link between rashes and unfiltered water has been found. If you have concerns, call your primary care doctor and call 2-1-1.

Is it safe to wash dishes and do laundry with unfiltered water?

- Yes, but dry them after. Wash dishes, bottles, and toys with unfiltered soapy water. Dry before use. Lead in water will not be absorbed by porcelain, metal, or glass. Clothes washed in plain tap water will not contain enough lead to cause harm.

Will water contaminated with lead hurt me or my children?

- Lead exposure can affect nearly every system in the body. It may not have obvious symptoms, so people might not realize they have too much lead in their bodies. For young children, exposure to lead can cause behavior problems and learning disabilities. The only way to know if you have lead in your body is to get tested.

We (residents) have been getting information on how to use water safely from many different organizations, and sometimes that information is conflicting. Who should we listen to?

- EPA is coordinating with the city, state, and other federal agencies to respond to all of the issues with Flint's water. Until further notice, EPA advises that residents should always use a water filter. Use only bottled water for water, food and formula given to babies under 1 year old. Bottled water is the safest choice for pregnant or breastfeeding women and kids under 6 years of age.

I had the water in my home tested and the result came back with low/no detectable lead. Can I stop drinking filtered or bottled water?

- No. Your low lead test result is encouraging, but the results are from a specific sample showing a snapshot in time. So it doesn't mean that your water is always safe to drink. There is still a citywide water emergency in Flint and everyone, including pets, should drink filtered or bottled water until further notice.
- Bottled water is the safest choice for pregnant and breastfeeding women and children under 6. Bottled water should be used for drinking and preparing food and formula for infants under 1 year old.

What is being done to make sure everyone is getting the information and resources including minority, immigrant, and other at-risk communities?

- Many federal and state agencies in the response are going to community meetings, speaking to the media, and distributing information as they sample water on where you may pick up a filter or bottled water. EPA also provides translation of information to Spanish, American Sign Language, Chinese, and Arabic for residents and has community involvement coordinators regularly contacting residents and community groups.
- Residents may contact EPA by emailing flintwater@epa.gov or calling 810-434-5122.

Does EPA support replacing the lead service lines in Flint?

Commented [HR1]: Diane- The questions in green are from the August 2016 press conference and should be fully vetted

- EPA supports removing lead service lines as one part of a long-term solution to the problem. Alone, replacing lead service lines won't be enough. Flint loses 30 percent of its drinking water every year to water main breaks that also let bacteria into the system. Corrosion control treatment needs to continue to make the water drinkable again in the short term.

If my lead service line is replaced do I still need to use a filter?

- Yes, you should still use a filter. Removal of lead service lines eliminates only one potential source of lead. Interior plumbing in your home may still contain lead. Point-of-use filters that fit into your faucet will protect against sources of lead in your interior plumbing.

Does the EPA have funds to replace lead pipes?

- **Drinking Water State Revolving Funds**, or **DQSRFs**, can be used to fund the replacement of lead service lines, including the portions of the line that is owned by the resident. Through the Drinking Water State Revolving Fund, EPA has provided over $17 billion since 1997 to support communities in their efforts to replace pipes and meet other critical drinking water infrastructure needs.
- EPA believes there is a critical state role as well, both in providing infrastructure financing and in ensuring that communities have the technical, managerial, and financial capacity to effectively run their water systems. For the 2016 fiscal year, Michigan received more than $80 million in capitalization grants for its drinking water and **Clean Water State Revolving Funds**. The state is responsible for distributing out a percentage of those funds each year to cities for water infrastructure investments.

Commented [MM2]: Diane, If leaving this question in, confirm the dollar amount.

What about the claims that the resources being provided aren't enough to address the infrastructure problem in Flint?

- EPA is taking this issue very seriously and our response is consistent with needs on the ground. That is reflected in the whole-of-government response that's been mobilized by the Obama Administration in terms of the resources provided by the Federal Emergency Management Agency, the leadership from the U.S. Department of Health and Human Services, EPA's expertise, and the resources in the budget that have been expedited to give Flint and the State of Michigan more resources to deal with this situation.

How is EPA monitoring what the City of Flint and State of Michigan are doing?

- EPA is closely monitoring progress made by the State of Michigan, the Michigan Department of Environmental Quality and the City of Flint to meet their obligations required by the **Safe Drinking**

Water Act, or **SDWA**, emergency order that EPA issued on January 21, 2016. The order requires the state, MDEQ, and the city to take a series of immediate steps to address the drinking water contamination in Flint.

- EPA has met with representatives from the state, MDEQ and city to discuss compliance with the order, including actions to make sure all data is publicly available and progress related to operational improvements.

Will EPA change any of its policies based on what happened in Flint?

- EPA is actively considering potential revisions to the **Lead and Copper Rule**. The primary goal is to improve the effectiveness of the rule in reducing exposure to lead and copper from drinking water. EPA anticipates proposed rule changes will be published in 2017. In the more immediate future, EPA will be issuing clarifications on how samples should be collected based on concerns raised by Flint residents and others.

How long will it take to get my results once EPA samples my water?

- EPA will call residents with their preliminary sampling results before posting it to the interactive maps. It is estimated that preliminary data will be available about 14 days after sample collection. Final data which has been through EPA's quality assurance checks is estimated to be available 20 days after sample collection.

How long will EPA's response team be sampling the water in Flint?

- EPA will be here as long as it takes to make sure the water is safe to drink. EPA's recent order also requires the city to provide the appropriate level of staffing and training to ensure that the water plant and distribution system can be effectively operated and maintained.

When will the water be safe to drink?

- EPA advises residents to continue using water filters or bottled water until EPA makes a determination that the corrosion control treatment has been optimized.

Are the corrosion control treatment steps being taken in Flint actually working?

- EPA data shows the system getting better across the board. We're seeing higher levels of corrosion control chemicals throughout the system, which means they can begin to bind to lead in pipes and form a protective coating.
- That being said, corrosion control treatments take time to be fully effective. Now that the City of Flint has switched back to a drinking water supply from the Great Lakes Water Authority, the protective coating within service lines is being built back up to appropriate levels. EPA is conducting sampling to determine when water is safe to drink, and to inform needed adjustments to corrosion control treatments.

The filters being handed out by the city are only rated to filter out 150 ppb or lower of lead. Many have lead results higher than that. Does that mean the filters are not working?

- EPA continues to recommend that Flint residents use NSF-certified filters in their homes to remove lead. EPA's latest sampling results confirm that these filters are effective in removing lead from drinking water, even at higher levels.
- If you have concerns about the effectiveness of your filter, please contact EPA at 810-434-5122 and we will come to your home and sample your filter. While the results of all filter tests will be posted online, no personal information will be included. If you want to have your water tested, you can use the free city water testing kit or request that EPA come and sample. Regardless of the individual test result, the citywide water emergency continues, and everyone should use a filter or bottled water until further notice.

Will whole house filters or reverse-osmosis filters be offered to residents?

- A whole-home filter may not be effective because it does not treat water that flows through interior pipes, brass and leaded-solder, which can contaminate the water with lead even after it has passed through a whole-home filter.
- Any water treatment filter used should be NSF-53 certified to remove lead and should be located at the end of the plumbing right before the tap, so that all water that flows through home plumbing is treated.

What other chemicals are being tested in the water? I've heard there is more that we need to be concerned with than lead.

- EPA is testing the water in Flint for many different chemical contaminants and is also conducting other water quality testing to comprehensively evaluate the overall safety of the water from lead, copper, microbes, disinfection byproducts and other heavy metals.

How does EPA decide what houses they want to sample?

- EPA is working with MDEQ and city to identify homes with lead service lines. Sampling was conducted on homes with high levels of lead in unfiltered water as possible locations with lead service lines. EPA is sampling homes to make sure filters are working, as well as locations where residents request sampling, and where rash complaints have been reported.

Commented [MM3]: Diane, Is EPA still sampling homes based on requests?

Are the old filter cartridges recyclable? Where can we recycle them?

- Yes. The State of Michigan recommends residents bring their used cartridges to the location where they got their filter to recycle the old cartridges and to get new ones.

How can we recycle used water bottles?

- Empty water bottles can be taken to any of the recycling stations that have been set up around the city or where you picked up bottled water. The city and state can make arrangements to pick them up from the disabled by calling 2-1-1. More information is available at www.michigan.gov/flintwater

Do the testers that come with pitcher filters test for lead (TDS meters)?

- **Total Dissolved Solid**, or **TDS** meters or test strips measure minerals in water, not lead—so they will not give you an accurate test of your water. The safest choice is to get your water tested. Call 2-1-1 or visit www.epa.gov/flint to find out where to get your water tested.

An EPA staff member shows a resident how to install a filter on the tap in her home.

Questions about EPA's Water Quality Sampling in Flint

Why is EPA conducting water sampling in a municipality?

- EPA established the Flint Safe Drinking Water Task Force in October 2015 to provide the Agency's technical expertise through regular dialogue with designated officials from MDEQ and the City of Flint. The Task Force is led by the Region 5 Acting Regional Administrator and assists with developing and implementing a plan to secure water quality, including measures to optimize corrosion control.
- On January 16, 2016, President Obama signed an emergency declaration ordering federal assistance to support state and local response efforts in Flint. As part of an inter-Agency effort being led by the U.S. Department of Health and Human Services, or HHS, EPA has deployed a response team to Flint to conduct sampling and analysis that will help state and local leaders identify the scope of contamination and design and execute a plan for mitigation.

How are sampling sites chosen?

- EPA is choosing water quality sampling sites based on a variety of factors, including but not limited to:
  - Information about sites that are suspected or confirmed to have lead plumbing.
  - Households where lead-levels are known to be elevated.
  - Locations where water may lie stagnant before use.
  - Other information about areas that may pose a higher risk or concern to the community.

When will residents receive sampling results?

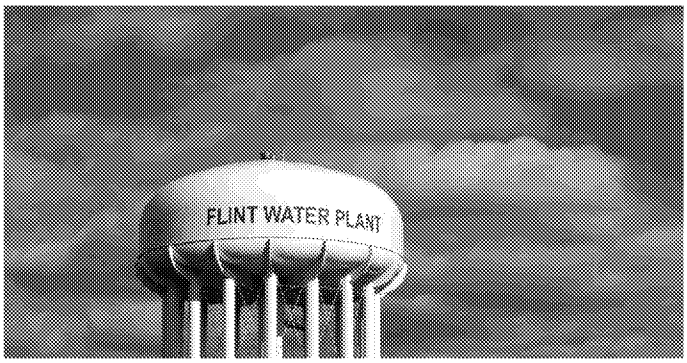
- Preliminary results are communicated verbally within 3 weeks of sampling. Final, quality assured results are delivered via mail 4-5 weeks after sampling.

How long will EPA's response team be sampling the water in Flint?

- EPA is committed to providing water quality information to support the restoration of safe drinking water for all Flint residents. EPA will continue its response efforts as part of the broader federal inter-agency team, and in collaboration with the MDEQ until the job is done.

Is the State of Michigan involved in this response effort?

- Yes. An EPA enforcement order requires that the State of Michigan collect samples and post data to a publicly available website. EPA is coordinating closely with MDEQ on the response in Flint.



Flint water tower.

COMMUNITY INVOLVEMENT/OUTREACH GOALS AND ACTIVITIES

Highlights EPA's community involvement goals, outreach and response activities to keep residents and local officials informed and involved and to assist the community with the water contamination as well as other local environmental issues.

When establishing the objectives for a response-specific community involvement program, we consider several factors, including EPA policy that assess the nature and extent of known or perceived contaminants and known community concerns, needs and requests.

To be effective, our community involvement and outreach program is designed to meet the community's need to know, give information in a timely manner and accommodate the community's needs and interests and its willingness to participate in decision-making processes. We must also share information in language the public can understand.

To meet the needs of the community, to respond to information obtained throughout the response and to adhere to EPA policy, we have established the following objectives for our community involvement and outreach efforts:

- Enlist the support, coordination and involvement of City of Flint and Genesee County officials and community partners.
- Enlist the support, coordination and involvement of MDEQ.
- Monitor citizen interest and respond accordingly.
- Keep the community well informed of ongoing and planned response activities including sampling efforts and the results of the sampling.
- Explain technical response activities and findings in an easy to understand format for residents.
- Get public input on key decisions.
- Change planned activities, where warranted, based on community input.
- Update EPA's website regularly and provide useful information on it for the community.
- Update City of Flint and Genesee County officials on a periodic basis even if no response activities are occurring.
- Hold **public meetings**, when necessary, within the community to give all community members an opportunity to attend and provide information to EPA that maximizes effectiveness of all response efforts.

- Empower EPA Community Ambassadors/Partners by providing education and resources that support them as messengers of critical health messages, including water/filter education.

- Support the Community Outreach and Resident Education, or CORE, Filter team in their efforts on filter education.
- Explain and ensure EPA's commitment to addressing Environmental Justice guaranteeing the fair treatment and meaningful involvement of all people--regardless of race, color, national origin or income.
- Search out and partner with the City of Flint to engage in community revitalization efforts dedicated to the long-term recovery of Flint, ending environmental and health disparities, and supporting community-defined goals to improve quality of life for all residents.
- Commit resources to assist in the elimination of lead poisoning in the children of Flint.
- Ensure the recovery of Flint's drinking water system.

EPA has or will put in place the activities described on the following pages to meaningfully and actively engage and respond to the community's needs with regard to the drinking water contamination and other environmental issues faced by the community. The following plan is intended as opportunities for communication between the community and EPA and to address key concerns and questions raised to EPA while in Flint.

Need caption.

Specific Community Outreach Activities

To address community needs with regard to the drinking water contamination and other environmental issues and community concerns and questions described in the Community Concerns section, EPA has conducted (or will conduct) the activities described below. Through these activities, it is our goal to inform, involve and engage the community in all EPA response activities. As the needs of the community change, we will modify the community response strategies to address them.

- **Maintain point of contact.** Diane Russell is the primary liaison between EPA and City of Flint and Genesee County communities. Ms. Russell serves as the Community Involvement Coordinator, or CIC, as a point of contact for community members and fields general questions about the response and outreach activities. For other issues, she coordinates with EPA's **Unified Command** group liaison Mark Durno and Flint Project Coordinator Rebecca Geyer. Their contact information is listed below and in Appendix C. Having designated points of contacts helps to ensure prompt and accurate dissemination of information to the public.

  We will include current contact information for the project staff on all written and electronic information and will notify the community of any contact information changes.

EPA has designated the following people as primary site contacts for local residents:

Commented [DM4]: Ramon should be added (as should Nina, eventually)

Commented [MM5]: Note per Diane: One spot not filled and the other is only there until January.

Diane Russell
Community Involvement Coordinator
989-401-5507
russell.diane@epa.gov

Mark Durno
Unified Command Group Liaison
440-250-1743
durno.mark@epa.gov

Rebecca Geyer
Flint Project Coordinator
810-287-9952
geyer.rebecca@epa.gov

- **Establish a local office and phone number for residents to ask questions and receive information.** EPA has established a local office in Flint. This office will be staffed by CIC Diane Russell, Project Coordinator Rebecca Geyer and several outreach specialists. These staff members will provide the community with a local presence and location where people can come in and talk with EPA directly. Residents can visit or call this local office and ask the staff questions as they arise instead of waiting for a public meeting or to receive written information. We will provide the office location and phone number in all of our communications with the public.

Flint Office

1101 S. Saginaw St.
Flint
810-434-5122

- **Maintain communication with local officials, agencies and community leaders.** Local officials, local agency representatives and community partners have indicated that they would like to be contacted with updated information on a periodic basis so that they can keep their constituents informed. We will continue to maintain communication with local officials and local agency representatives throughout activities and with our community partners to support their grassroots work.

- **Provide translators to communicate with residents.** EPA has and will continue to provide translation of information to Spanish, American Sign Language, Chinese and Arabic for residents. Having translation services helps to ensure that all community members will have access to information and, in turn, we will be able to learn and understand questions or concerns from community members regardless of what language they speak.

- **Share site information on the Internet.** We will provide information on activities and communications on the following EPA website. The website will be updated as events occur. The website allows EPA to make information available quickly.

  www.epa.gov/flint

- **Develop and maintain a mailing list.** We will establish a mailing list of local residents, organizations, businesses, community partners and officials for the site. This list will be used for mailing fact sheets, site updates, invitations to public meetings and events and other information mailed to the community. We will update the list regularly to reflect address changes and changes in elected officials and to add new people interested in response activities.

  This is a way to ensure that those that do not have access to the Internet or other information sources still have a way to receive information directly about the site and are notified about important meetings. The mailing list is for EPA use only and is not shared with outside entities. If a community member is interested in being placed on the mailing list they can contact Diane Russell, the CIC for Flint.

- **Prepare and distribute fact sheets and updates.** EPA has developed and distributed a series of fact sheets to residents that inform community members on public health safeguards, proper utility of filters, recommended flushing protocols, water system recovery overviews, commodity resource locations and hotline information. We will continue to prepare and distribute fact sheets, letters and updates summarizing current information about the response as well as describing upcoming

activities. These documents are written in non-technical language and translated into Spanish. As needed, we will also translate the fact sheets into other languages.

We use these types of documents to give the community detailed information in a relatively quick, simple and easy-to-understand manner. Fact sheets have been distributed through "material drops". EPA has identified numerous convenient and popular locations in the community where people can pick up copies of written material. We also post the fact sheets and site updates on EPA's website: **www.epa.gov/flint.**

- **Write and distribute news releases and public notices.** We will prepare and release announcements to the local newspaper such as *The Flint Journal* to share information about events, significant findings and public meetings. We will also provide this information to City of Flint and Genesee County for posting on their respective websites.

  News releases allow us to reach large audiences quickly. We will also post the news releases on the website, www.epa.gov/flint.

- **Media relations.** EPA Headquarters and Region 5 media relations staff will continue to work in Flint to manage media inquiries, liaison with reporters, facilitate interviews and work with our municipal and state government colleagues on joint communications initiatives. We have established relationships with local minority media, including African American and Spanish language media outlets. We will continue with those outreach efforts ensuring minority populations are informed.

- **Participate in targeted media interviews.** EPA will participate in interviews with local media outlets in Flint. The intent of this media outreach is to take the opportunities to explain technical information to ensure the public is informed. The interviews will help EPA reach a large audience quickly and reinforce and share information further.

- **Produce public service announcements.** EPA has produced public service announcements to assist in educating the public on the use of water filters, the importance of running their water to keep the pipes flushed as well as other topics. PSAs allow EPA to reach a large audience and explain information in a format community members are familiar with. As needed, EPA will continue to produce PSAs to educate the community.

- **Conduct public meetings, hearings, and listening and information sessions.** A public meeting is an opportunity for EPA to present specific information and a proposed course of action. EPA staff is available to share information and answer questions. A public meeting is not a formal public hearing where testimony is received. Instead, it might be a meeting to exchange information or comments. In addition, we may hold an informal open-house style meeting, called an availability session, where residents can meet EPA experts one-on-one to discuss the response activities. Either type of meeting allows community members an opportunity to express their concerns and ask questions of the

Agency, state or local government officials. We typically schedule a meeting when there are technical milestones or the community has expressed an interest in having a meeting. A public hearing is a formal meeting where we hear the public's views and concerns about an EPA action or proposal. Public hearings are recorded by a professional transcriber. The comments are also posted on the Web. EPA will consider conducting additional meetings at different times and different locations throughout the community to give all residents an opportunity to attend as needed.

- **Hold individual and small group briefing meetings on water quality.** EPA will hold individual and/or small group meetings with community leaders on the current state of recovery of the water system. The purposes of these meetings are to ensure that community leaders: (1) fully understand the trends of EPA's sampling information, and (2) seek feedback on the best ways to discuss these complicated issues.

- **Provide education and resources to EPA Community Ambassadors.** EPA Community Ambassadors are a group of 40 community leaders and advocates the Agency consults with and solicits advice from regarding engagement and outreach strategies. EPA has established a forum in which EPA Flint staff can continue to engage and work with the Agency's community partners on ongoing outreach efforts. We will provide education and resources to the Community Ambassadors to support them as messengers of critical health messages, including water/filter education.

- **Provide speakers to community groups.** EPA community involvement and technical staff will go out into the community to give formal presentations to small- and medium-sized audiences to provide overviews on what the Agency is doing to address the city's drinking water situation, receive feedback from residents on recovery efforts and answer questions. These speaking engagements will assist in ensuring the community is informed about the status of their drinking water as well as other EPA response activities. They will also help EPA understand what questions the community has about our efforts.

EPA CIC Charles Rodriguez talks with community members about the water contamination in Flint.

- **Participate in Points of Recovery Meetings.** EPA staff will continue to attend and participate in the Points of Recovery meetings, which are also attended by a number of governmental/non-profit/community organizations. We will give periodic updates on recovery of the water system at the meeting. Attendance at these meetings will facilitate in ensuring the community is informed on the status of the water recovery.

- **Develop workshops.** We will identify and develop workshops on a variety of topics that are focused on educating and empowering Flint residents and organizations to leverage and take advantage of EPA resources to support the long-term recovery of Flint. Topics could include:
  - *Lead-based Paint/Healthy Homes Workshops*: This workshop will provide comprehensive education on how to improve the home environment and health.
  - *EPA 101 Workshop*: This workshop would be focused on providing necessary context about EPA's work. Topics that may be addressed include: what does it mean to have an oversight authority; what's an enforcement Agency; what are risk-based standards; etc.
  - *Grants Workshop*: NEED DESCRIPTION
  - ***Brownfields*** *Program:* EPA's Brownfields Program is designed to empower states, communities, and other stakeholders in economic redevelopment and changing the way that contaminated property is perceived, addressed, and managed.
  - *Clean Water Act:* NEED DESCRIPTION
  - *Resource Conservation and Recovery Act:* This workshop would explain RCRA including the storage and hazardous chemicals.
  - *Environmental Justice 101:* This workshop would explain what Environmental Justice is, and the EJ landscape in Flint.
  - *Urban Waters Program:* NEED DESCRIPTION
  - *Renovation Training:* NEED DESCRIPTION

Commented [MM6]: Needs description

Commented [MM7]: Needs description

Commented [MM8]: Needs description

Commented [MM9]: Needs description

- **Develop a risk communication program.** Toward the end of 2016, EPA will develop a program to ensure Flint's residents have the information needed to understand long-term risk associated with lead in the drinking water system. This program will educate on the short-term risks as the system continues to recover from corrosion that occurred during the crisis. The program will also educate on the long term issues including what to do during lead service line replacement and other 'disturbances' that can happen with the system. EPA will set up availability weeks throughout the community as part of this effort.

- **Develop training programs.** EPA has participated in a weekly class on water quality. We will also develop training programs on various topics to educate the community on various environmental issues. Topic areas may include "Intro to the Flint Water Response"; "Water Quality/Filter Use"; "Skin Care 101"; "Healthy Home and Bed Bugs"; "Fighting Lead with Nutritious Food"; "Social Security Benefits 101"; HHS Service available to Flint residents/how to navigate the web of services.

Commented [MM10]: I am not sure about this last one.

- **Produce instructional videos.** We have produced a series of on-line instructional videos that have been posted online and shared with Flint residents on proper installation and use of filters as well as the importance of pipe flushing. Studies show that visual instruction enhances understanding and retention. As needed, EPA may develop more instructional videos.

- **Participate in local events.** EPA will search out opportunities to participate in local events such as fairs, festivals and expos. This will allow the Agency to distribute information to a wide variety of people and to talk to residents one-on-one that may not attend other EPA events.

- **Provide assistance to CORE Filter Education Liaisons**. EPA will assist MDEQ in the training and onboarding of up to 40 newly hired Filter Education Liaisons. Filter Education Liaisons will go door-to door educate the community on how to use water filters providing personal instruction to residents.

- **Promote the College/Underserved Community Partnership Program, or CUPP.** EPA will promote university/community partnerships to address community needs through student coursework. This program would create partnerships between local colleges and universities at no cost to the community. We are currently working on developing programs with Kettering University and Michigan State University.

- **Provide consultation services through the Drinking Water Task Force.** Staff from EPA's Water Division and other areas at EPA make up the Drinking Water Task Force. Task Force members consult with MDEQ and the City of Flint. The Task Force also coordinates as necessary with federal, state and local public health agencies to assist with protection of public health. Specifically, the Task Force provides technical assistance to the MDEQ and the City of Flint to reconnect the Flint system to a new source of drinking water (to be supplied by the Great Lakes Water Authority) and to optimize corrosion control for the Flint system.

- **Support revitalization activities.** Through its Brownfields program, EPA has been providing revitalization assistance to the community of Flint for decades. We will continue to seek out and assist the community with revitalization activities including those involving blight elimination; **cleanup** and reuse of vacant land such as Chevy Commons; and providing environmental services in the development projects such as the Swayze Apartments senior assisted living project. We have begun

Chevy Commons Cleanup
Chevy Commons is a 60-acre portion of the city-owned, former automobile manufacturing facility commonly known as Chevy in the Hole. A January 2015 Design Plan lays out a 3-phase process for transforming this brownfields site into a park-like space that includes open grasslands, woodlands, and wetlands interlaced with trails that will link to the surrounding institutions, neighborhoods, and regional trails (connecting downtown, the Carriage Town and Grand Traverse neighborhoods, UM-Flint, and Kettering University). EPA will issue $300,000 in additional funding by the end of this fiscal year.

conversations with the City of Flint to identify how EPA can continue to contribute over the longer term to address Flint's economic, environmental and public health priorities.

Commented [MM11]: Diane: Note the reference to an additional funding of $300k by the end of the fiscal year in the box below. Has that happened?

- **Provide grants and grant assistance.** EPA will provide grants and assistance in applying for grants to assist the community with a variety of projects including: a grant for $91,000 EPA supplied to the University of Michigan Public Health to institute a project that partners U of M with community-based organizations in Flint to increase environmental literacy among community members and students to encourage actions and behaviors that enhance local water quality and to serve as a model for the other communities. EPA will continue to seek grant proposals from eligible applicants to support environmental education projects that promote environmental awareness and stewardship and help provide people with the skills to take responsible actions to protect the environment.

EPA will also commit brownfield funding directly to the city or through the Genesee County Land Bank for revitalization projects in the community. When site investigation grants are depleted, EPA may also provide direct service for brownfield investigations in which Agency staff assume work at sites the city selects.

Commented [MM12]: I am not sure I fully understand these last 2 grant concepts.

- **Conduct oversite of the state and city drinking water response**. EPA will conduct sampling to monitor progress of the recovery of the drinking water system in Flint.

Commented [MM13]: I am not sure about this either.

- **Develop a Children's Health Program.** We will develop program to comprehensively eliminate lead poisoning in Flint that begins with outreach to key local leaders to refine understanding of needs to further scope the project.

Commented [MM14]: This needs information on what will actually be done.

Needs caption.

- **Create an inter-agency Environmental Justice effort around Flint.**

Commented [MM15]: I have no information on this, but it seems like it would be an activity.

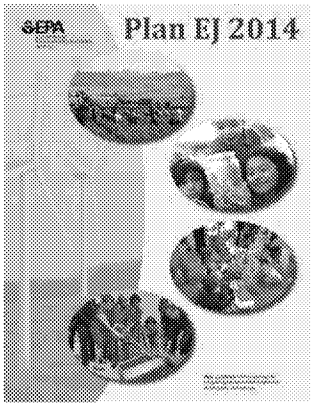
- **Assist with Flint River restoration.** EPA will provide assistance in restoration of the Flint River.
- **Provide additional tools for the community as needed.** We will remain open to new opportunities to support the City of Flint.
- **Evaluate community involvement and outreach efforts and make adjustments as warranted.** This CIP was designed to consider site- and community-specific factors. Within this CIP, community concerns, the objectives of the community involvement program for the response, and the specific activities to address these concerns were based on information obtained during interviews with community members. We recognize that changes in areas such as community perceptions, information needs and population demographics can occur over time and that such changes may necessitate a revised approach to conducting community involvement activities. For this reason as well as to determine whether the activities in this plan are achieving their intended objectives, we will conduct periodic reviews to determine whether additional activities are warranted or whether changes to current methods of starting up the activities outlined in this plan are necessary. As the needs of the

EPA CIC Janet Pope provides materials to community members to help them understand how to protect themselves from the lead in the water.

community change, we will modify the community involvement strategies to address them in a CIP revision.

For more information regarding Flint Water testing results, please visit www.michigan.gov/flintwater or contact the DEQ's Environmental Assistance Center at 800-662-9278.

Environmental Justice



EPA defines environmental justice as fair treatment and meaningful involvement of all people--regardless of race, color, national origin or income-- with respect to development, implementation, and enforcement of environmental laws, regulations, and policies.

Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, or commercial operations, or the execution of federal, state, local, and tribal programs and policies.

Meaningful involvement means that potentially affected community residents have an appropriate opportunity to participate in decision-making about a proposed activity that will affect their environment and/or health.

The Environmental Justice Act of 1992 obligates federal agencies to make environmental justice part of its overall mission by "identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Following this order, the Office of Environmental Equity within EPA became the Office of Environmental Justice. EPA's Office of Environmental Justice ensures that all people, regardless of race, color, national origin, or income, enjoy the same degree of protection from environmental and health hazards and equal access to the decision-making process for a healthy living, learning, and work environment. Ensuring environmental justice means not only protecting human health and the environment for everyone, but also ensuring that all people are treated fairly and are given the opportunity to participate meaningfully in the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA considers the City of Flint an environmental justice community, which means it is a community that historically is an under-represented minority and low-income area burdened with significant environmental challenges.

When making decisions about a response and planning its community involvement initiative for a community, environmental justice issues must be taken into account. As part of this effort, the EPA collaborates with the state agencies, representatives from the City of Flint and concerned citizens in addressing environmental challenges in more effective, efficient, and sustainable ways.

Plan EJ 2014 is a road map that will help EPA integrate environmental justice into the Agency's programs, policies, and activities. Plan EJ 2014 is named in recognition of the 20th anniversary of President Clinton's issuance of Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

In implementing the Plan, EPA will seek to meaningfully engage with communities and stakeholders.

The goals of the plan are to:

- Protect health in communities over-burdened by pollution
- Empower communities to take action to improve their health and environment
- Establish partnerships with local, state, tribal and federal organizations to achieve healthy and sustainable communities.
- Plan EJ 2014 is not a rule or regulation. It is a strategy to help integrate environmental justice into EPA's day to day activities. More information can be found at: www.epa.gov/environmentaljustice/index.html.

EPA is assisting Flint in revitalization efforts to support the whole community.

Community Involvement/Outreach Activities	Status
Maintain point of contact	Complete
Establish a local office and phone number for residents to ask questions and receive information	Complete; Published on written materials and on website
Maintain communication with local officials, agencies and community leaders	Ongoing as needed
Provide translators to communicate with residents	Ongoing as needed
Share information on the Internet	Complete; Update as needed
Develop and maintain a mailing list	Will develop; Update as needed
Prepare and distribute fact sheets and updates	Complete; Update as needed
Write and distribute news releases and public notices	Ongoing as needed
Media relations	Ongoing as needed
Participate in targeted media interviews	Ongoing as needed
Produce public services announcements	Ongoing as needed
Conduct public meetings, hearings, and listening and information sessions	Ongoing as needed
Hold individual and small group briefing meetings on water quality	Ongoing as needed
Provide education and resources to EPA Community Ambassadors	Ongoing as needed
Provide speakers to community groups	Ongoing as needed
Participate in Points of Recovery meetings	Ongoing as needed
Develop workshops	Ongoing as needed
Develop a risk communication program	Ongoing
Develop training programs	Complete; Update as needed
Produce instructional videos	Complete; Update as needed
Participate in local events	Ongoing as needed
Provide assistance to CORE Filter Education Liaisons	Ongoing as needed
Promote the College/Underserved Community Partnership Program, or CUPP	Ongoing as needed
Provide consultation services through the Drinking Water Task Force	Ongoing as needed
Support revitalization activities	Ongoing as needed
Provide grants and grant assistance	Ongoing as needed
Conduct oversite of the state and city drinking water response	Ongoing as needed
Develop a Children's Health Program	Need status
Create an inter-agency Environmental Justice effort around Flint	Need status
Assist with Flint River restoration	As needed
Provide additional tools for the community as needed	As needed
Evaluate community involvement and outreach efforts and make adjustments as warranted	As needed

Commented [MM16]: Need status

Commented [MM17]: Need status

EPA Brownfields Program

Since its inception in 1995, EPA's Brownfields Program has grown into a proven, results-oriented program that has changed the way contaminated property is perceived, addressed, and managed. EPA's Brownfields Program is designed to empower states, communities, and other stakeholders in economic redevelopment to work together in a timely manner to prevent, assess, safely clean up, and sustainably reuse brownfields.

A brownfield is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a **hazardous substance**, pollutant, or contaminant. It is estimated that there are more than 450,000 brownfields in the U.S. Cleaning up and reinvesting in these properties increases local tax bases, facilitates job growth, utilizes existing infrastructure, takes development pressures off of undeveloped, open land, and both improves and protects the environment.

Beginning in the mid-1990s, EPA provided small amounts of seed money to local governments that launched hundreds of two-year Brownfields "pilot" projects and developed guidance and tools to help states, communities and other stakeholders in the cleanup and redevelopment of Brownfields sites. The 2002 Small Business Liability Relief and Brownfields Revitalization Act (the "Brownfields Law") codified many of EPA's practices, policies and guidance. The Brownfields Law expanded EPA's assistance by providing new tools for the public and private sectors to promote sustainable Brownfields cleanup and reuse.

Brownfields grants continue to serve as the foundation of EPA's Brownfields Program. These grants support revitalization efforts by funding environmental assessment, cleanup, and job training activities.

- Brownfields Assessment Grants provide funding for Brownfields inventories, planning, environmental assessments, and community outreach.
- Brownfields Revolving Loan Fund Grants provide funding to capitalize loans that are used to clean up brownfields.
- Brownfields Job Training Grants provide environmental training for residents of Brownfields communities.
- Brownfields Cleanup Grants provide direct funding for cleanup activities at certain properties with planned greenspace, recreational, or other nonprofit uses.
- Brownfields Area-Wide Planning Grants provide funding to communities to research, plan and develop implementation strategies for cleaning up and revitalizing a specific area affected by one or more brownfields sites.

In Flint, EPA is using the Brownfields program to help with revitalization efforts as outlined in Specific Community Outreach Activities on Page 22.

Flint Safe Drinking Water Task Force

The Task Force is comprised of scientists and technical experts from the EPA Region 5 office in Chicago, the National Risk Management Research Lab in Cincinnati and the EPA drinking water program. In addition, the Governor has designated an MDEQ official and the Mayor of Flint has designated a city official to serve as points of contact for the Task Force.

Task Force members are available to consult with MDEQ and the City of Flint. The Task Force also coordinates as necessary with federal, state and local public health agencies to assist with protection of public health.

Specifically, the Task Force provides technical assistance to the MDEQ and the City of Flint to reconnect the Flint system to a new source of drinking water (to be supplied by the Great Lakes Water Authority) and to optimize corrosion control for the Flint system, starting in October 2015. The Task Force provides technical assistance to the MDEQ and the City of Flint, as needed, in advance of and following connection of the Flint water system to a new source of drinking water (to be supplied by the Karegnondi Water Authority) and to optimize corrosion control for the Flint system, starting in 2016.

Bob Kaplan (Chair), Region 5 Acting Regional Administrator
Miguel Del Toral, Region 5 Ground Water Drinking Water Branch Regulations Manager
Darren Lytle, Office of Research and Development Scientist
Michael Schock, Office of Research and Development Scientist
Jeff Kempic, Office of Water Lead and Copper Rule Technical Lead
Tim Henry, Region 5 Water Division Deputy Director
Tom Poy, Region 5 Ground Water Drinking Water Branch Chief

Past Community Outreach Efforts

In addition to the specific ongoing community involvement activities outlined on pages XX to XX, EPA also completed the following community outreach activities at the site:

- **Non-profit/community organization door-to-door canvassing partnerships**
  From January through March 2016, EPA partnered with two local community organizations – Michigan Faith in Action and Flint Rising – on weekend door to door canvassing operations. This effort successfully knocked on over 7,000 doors, had over 2,500 in-person conversations and passed out several hundred EPA/CDC factsheets.

- **EPA community involvement coordinator home sampling visits**
  EPA CICs joined water samplers in visiting several hundred homes throughout Flint to speak directly with residents on the EPA sampling procedures and where they can go for more information.

- **EPA canvassing operation**
  From January to March 2016 participated in canvassing operations. EPA developed a target list of over 500 public locations such as places of worship, libraries, schools, daycare centers, elderly centers, barber shops, beauty salons and community centers that Agency staff canvassed to educate and engage residents on measures they should take to safeguard themselves from high lead exposure. These canvassing efforts were enhanced to ensure that the Agency would reach minority populations including Latino, African American and low-income neighborhoods.

- **St. Luke's water class**

The St. Luke's Water Class is a class that took place once a week at the St. Luke's Life Center from September 13 – November 1, 2016. EPA CIC Diane Russell participated in the class.

- **Public expos – North Flint, downtown Flint and Southwestern Flint**
  EPA, HHS, and state and local organizations conducted an EPA-coordinated informational open house. Residents received information on the status of the Flint drinking water system, health information and information on where they can continue to obtain bottled water and filters. EPA staff and representatives from other participating organizations were on-hand to discuss relevant issues and answer resident's questions one on one.

- **EPA-HHS Joint Community Outreach Initiative**
  During summer of 2016, EPA and HHS launched a joint eight week canvassing/outreach operation to educate, engage and inform residents on proper filter usage and the expansion of health and nutrition services available to community members.

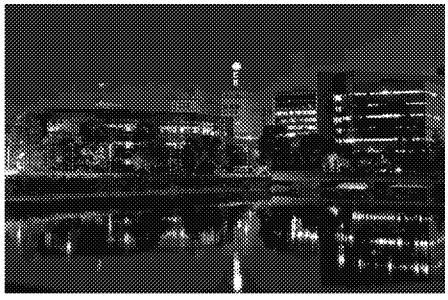
THE COMMUNITY

Provides a brief summary of the composition and history of the City of Flint and Genesee County.

Community Profile

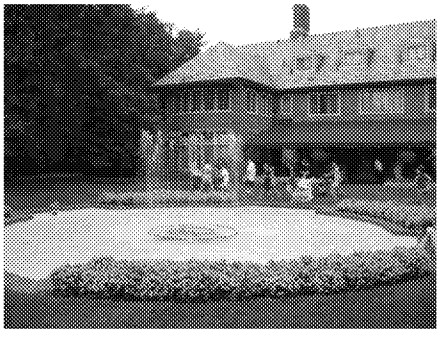
City of Flint

The City of Flint was founded in 1819 by fur trader Jacob Smith as a trading post between Detroit and Saginaw on the historic Saginaw Trail. The land was inhabited by several Ojibwa tribes at the beginning of the 19th century. They called the river Pawanunking, or "River of Flint," which is how the settlement got its name. As a popular lumber trading, fur trading, and agricultural spot, Flint's population grew quickly, and it officially became a city in 1855. In 1886, the Durant-Dort Carriage Company opened, and Flint became the leading producer of carriages in the State of Michigan.



Flint at night.

At the start of the 20th century, Flint's primary industry shifted from carriages to automobile production. In 1903, Buick Motor Company moved their headquarters from Detroit to Flint, and by 1908 General Motors Company was born. The sit-down strike at the General Motors Plant in Flint in 1936-1937 lead to the formation of the United Automobile Workers of America union. Flint was also a major producer of tanks and other war machines during World War II.

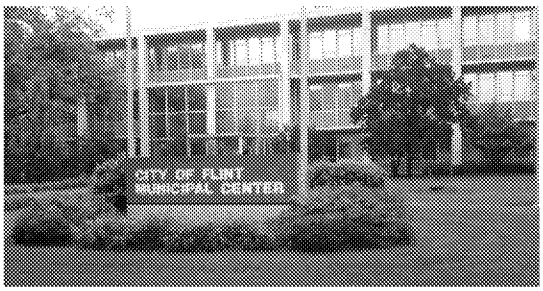


Applewood Estate.

Flint is home to Kettering University (1919), Mott Community College (1923) and the University of Michigan – Flint (1956). The city also boasts a cultural center, which includes the Flint Institute of Arts, the Robert T. Longway Planetarium, Flint Public Library and the Alfred P. Sloan Museum. Applewood estate, built in 1916, is a community resource and a Michigan Historic Landmark is also part of the Flint Cultural Center. According to the 2010 Census, the City of Flint has a total land area of 33.42 square miles.

Governmental structure

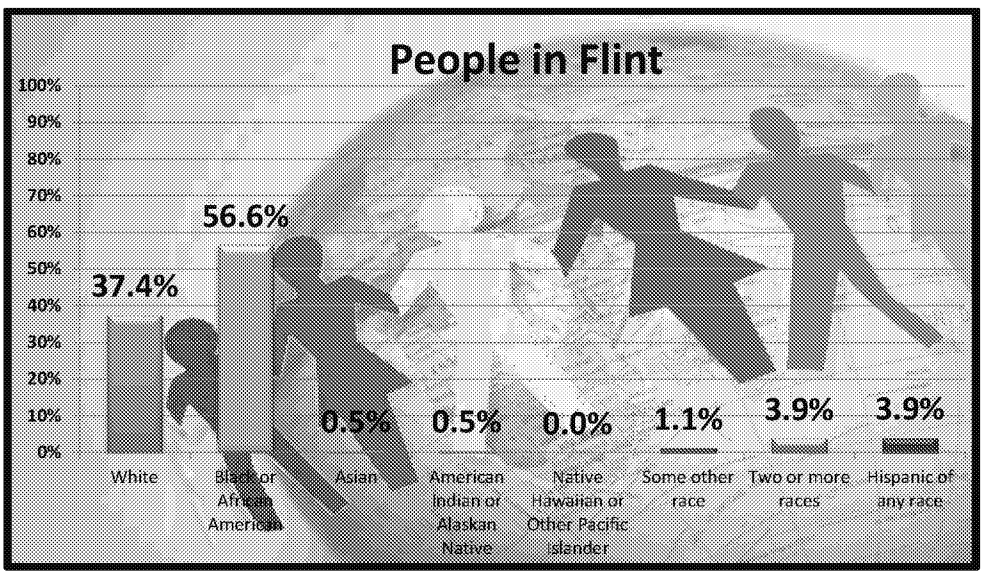
The City of Flint has a mayor and a city council made up of nine representatives from each of the city's wards. The council members are elected and serve four-year terms. They meet once a month at regularly-scheduled meetings to discuss city business. Dr. Karen Weaver, the current mayor of Flint, was elected in 2015 and is the first female mayor.



City of Flint Municipal Center.

Demographics

According to the 2010 Census, the population of the City of Flint is 102,434 people with a median age of 33.6. The racial make-up is predominantly African American with 56.6 percent of the population, followed by 37.4 percent white, 0.5 percent American Indian and Alaska Native, 0.5 percent Asian and 1.1 percent identified as some other race. Sixteen individuals identified as Native Hawaiian and Other Pacific Islander while 3.9 percent were two or more races and 3.9 percent were Hispanic or Latino of any race.



According to the 2014 American Community Survey, there are 53,315 total housing units in the City of Flint. Of those housing units, 40,509 are occupied and the other 12,806 housing units are vacant. The median home value is $36,700. The 2010 Census determined that in a survey of 40,472 households, 59.2 percent are family households, with 28.8 percent having children under the age of 18. About 40.8 percent were non-family households, and 33.9 percent were householders living alone. The same survey found that the average household size was 2.45 people.

According to the 2014 American Community Survey Estimate for individuals 25 years and over, 35.6 percent have a high school education or equivalent, 28.7 percent have some college education but no degree, 7.3 percent have a bachelor's degree and 4.0 percent have a graduate or professional degree. About 41.6 percent of individuals are below the poverty level.

The language spoken in Flint is predominantly English with 97.2 percent of the population speaking only English. About 2.8 percent speak a language other than English, with 1.5 percent speaking Spanish or Spanish Creole and 0.7 percent speaking other Indo-European languages. About 0.3 percent of the population speaks Asian and Pacific Island languages and another 0.3 percent speak some other language.

Genesee County

Genesee County consists of approximately 637 square miles. It was created in March of 1835 and Flint is the designated county seat. Located in mid-Michigan, Genesee County is home to many popular attractions such as off road vehicle park The Mounds, miles of outdoor trails and the authentic 1900s town of Crossroads Village.

Governmental structure

The Genesee County government consists of a nine-member Board of County Commissioners. The commissioners are elected and serve four-year terms. They meet twice a month at regularly-scheduled meetings to discuss county business. The commissioners are primarily responsible for signing contracts and managing the county budget, facilities and personnel.

Genesee County court house.

Demographics

According to the 2010 Census, the population of Genesee County, Michigan is 425,790 people with a median age of 38.5. About 414,774 citizens are one race, with 74.5 percent of the population being white, 20.7 percent African American, 0.9 percent Asian, 0.5 percent American Indian or Alaska Native, 0.7 percent belonging to some other race, 79 individuals identifying themselves as Native Hawaiian, 2.6 percent are two or more races, and 3 percent identify as Hispanic or Latino of any race.

According to the 2014 American Community Survey Estimate, Genesee County has a total of 191,447 housing units. Of those units, 165,962 are occupied and 25,485 are vacant. The median home value is $88,300. The 2010 Census determined that in a survey or 169,202 households, 66 percent are family households, with 29.3 percent having children under the age of 18. 34 percent were non-family households, and 28.4 percent were individuals living alone. The average household size was 2.48 people.

According to the 2014 American Community Survey for individuals 25 years or older, 33.1 percent have a high school education or equivalent. About 27.1 percent have some college education with no degree, 12.0 percent have a bachelor's degree, and 7.2 percent have a graduate or professional degree. About 21.2 percent of individuals are below the poverty level.

The language spoken in Genesee County is predominantly English, with 96.4 percent of the population speaking only English. About 1.2 percent speak Spanish or Spanish Creole, another 1.2 percent speak another Indo-European language, 0.5 percent speak Asian and Pacific Island languages, and 0.7 percent speak some other language. According to the 2014 American Community Survey, 1 percent of the population of Genesee speaks English less than "very well."

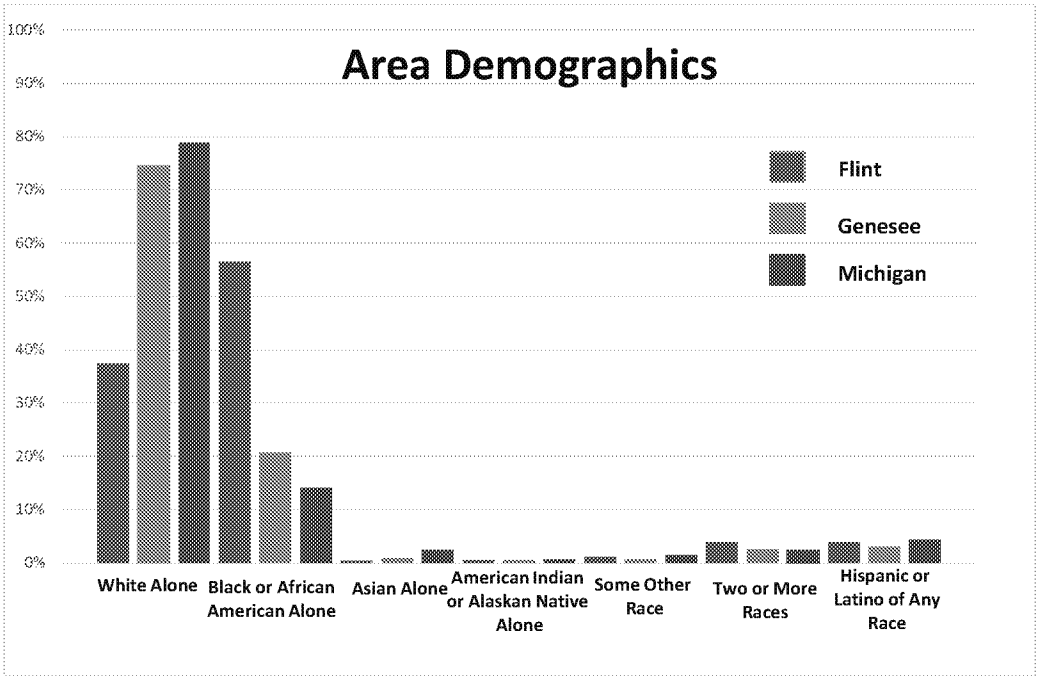
Genesee County history

Prior to European settlement, Genesee County was occupied by the Chippewa, or Ojibwa, Pottawatomi and Ottawa tribes. In the early 19th century, the Governor of Michigan sent Austin E. Wing to explore the region around Detroit. Wing's party consisted of about five people, and the woods of Genesee impressed them. Drawn by the forests and fertile land, many settlers soon moved to Genesee and the lumber and fur industries boomed.

Genesee County was created in March of 1835 and designated Flint as the county seat. Today, the County consists of 17 townships and 11 cities, the largest still being Flint. Genesee is known for its wealth of parkland and trails, as well as The Mounds, a popular Off Road Vehicle park. Crossroads Village, an authentic Great Lakes town from the early 1900s, is another popular attraction. It has a railroad, a schoolhouse, and opera house and multiple craftsmen.

Michigan demographics

According to the 2010 Census, the population of Michigan is 9,883,640 people with a median age of 38.9. About 97.7 percent of citizens are one race, with 78.9 percent of the population being white. About 14.2 percent were African American, 2.4 percent were Asian and 1.5 percent were some other race. About 2,604 individuals identified as Native Hawaiian or Pacific Islander, 2.3 percent were two or more races and 4.4 percent of the population was Hispanic or Latino of any race.



According to the 2014 American Community Survey 5-Year Estimates, there is a total of 4,532,719 housing units in Michigan. Of those units, 3,827,880 are occupied and the remaining 704,839 are vacant. The 2010 Census found that in a survey of 3,872,508 households, 66 percent were family households, with 28.6 percent having children under the age of 18. 34 percent were non-family households, with 27.9

percent of householders living alone. The average household size was 2.49. The median home value for Michigan is $120,200.

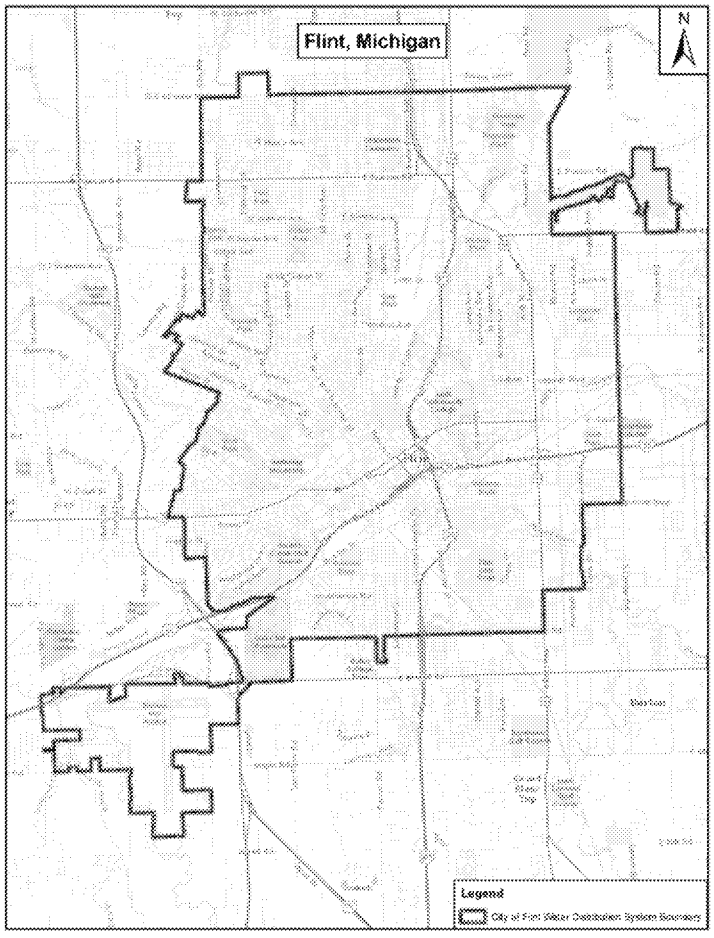
According to the 2014 American Community Survey for the population 25 years and over, 30.2 percent of the population has a high school education or equivalent, 23.9 have some college education with no degree, 16.1 percent have a bachelor's degree and 10.3 percent have a graduate or professional degree. 16.9 percent of individuals are below the poverty level.

The main language spoken in Michigan is English, with 90.9 percent of individuals speaking only English. 2.9 percent of the population speaks Spanish or Spanish Creole and another 2.9 percent speaks another Indo-European language, 1.5 percent speak Asian and Pacific Island Languages and 1.8 percent speak another language. According to the 2014 American Community Survey Estimate, 3.2 percent of Michiganders speak English less than "very well."

HISTORY OF WATER CONTAMINATION AND WATER RECOVERY EFFORTS

Description and history of water contamination and recovery activities.

Flint Response Area Map



History

On April 25, 2016, the City of Flint changed their municipal water supply source from the Detroit-supplied Lake Huron water to the Flint River. The Detroit-supplied water was very high quality but very expensive, costing the city on average $1 million per month and the average household $140 per month. The Flint Water Treatment Plant was built in 1952 and was used as a backup to the Detroit water in cases of emergency. The plant underwent major renovations in 2014, which were intended to allow the plant to filter and purify higher volumes of raw water. Under financial pressure, the city decided to open the treatment plant early.

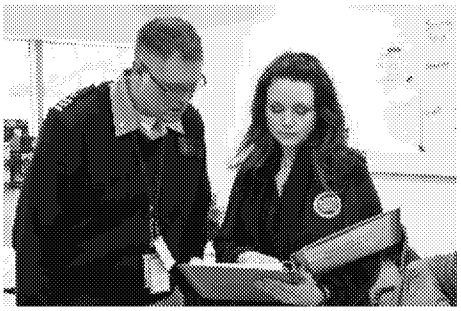
Starting in July 2014, Flint water underwent the first of two rounds of lead sampling. The second round, completed in June of 2015, showed that lead levels were rapidly rising. In April 24, 2015, MDEQ notified EPA that Flint did not have any corrosion control treatment in place at the Flint Water Treatment Plant. That following May and June, EPA Region 5 staff expressed concerns to MDEQ and the City of Flint about the high levels of lead in drinking water and the lack of corrosion controls. They recommended that the city utilize the expertise of the EPA's office of Research and Development to avoid further water problems moving forward. Again in July 2015, EPA discussed their concerns with MDEQ and the city about the lead levels and the implementation of the Lead and Copper Rule, and MDEQ agreed to require corrosion control as soon as possible. In August, MDEQ sent a letter to the city recommending corrosion control treatment be implemented as soon as possible, no later than January 1 2016, to fully optimize treatment within six months. Two weeks later, EPA Region 5 had a call with MDEQ to discuss citizen outreach to reduce exposure to the high lead levels in drinking water and to reiterate the EPA's offer of technical assistance. On September 3, 2015, the Flint Mayor announced that the city would implement corrosion control.

On September 24, 2015, Hurley Medical Center Researcher released a study that demonstrated that there had been an increase in elevated blood-lead levels in children since the city switched their water supply. The city released an advisory to citizens on September 25, 2015 to only use water from the cold tap for drinking, cooking and baby formula. Two days later, the EPA Region 5 Regional Administrator called the MDEQ Director to discuss the expedition of corrosion control treatment and the importance of testing protocols, and urged MDEQ to enlist the Michigan Department of Health and Human Services and provision of bottled water, premixed baby formula, and filters until corrosion control is optimized.

On October 1, 2015, Genesee County Board of Commissioners and Genesee County Health Department declared a public health emergency and advised residents of Flint not to drink the municipal water unless it had been filtered through an NSF-approved filter certified to remove lead that meets American National Standards Institute, or ANSI, standard 53. The Flint TAC met about the city's corrosion control and treatment on October 7, 2015 and recommended that the city return to purchasing Detroit water. On October 16, 2015, the city switched back to purchasing water from Detroit, now the Great Lakes Water Authority. The same day, EPA established the Flint Safe Drinking Water Task Force, or EPA Flint Task Force, to provide technical expertise to MDEQ and the city.

On November 9, 2015, the EPA Flint Task Force requested information that would allow the EPA to monitor progress being made on corrosion control in Flint. On December 9, 2015, the city began adding additional **orthophosphate** at the Flint Water Treatment Plant to begin optimizing corrosion control treatment. The City of Flint declared an emergency on December 14, 2016. A month later, on January 14, 2016, the Governor of Michigan requested the declaration of a major disaster and emergency and requested federal aid. Two days later, President Obama declared a federal state of emergency for the City of Flint and Genesee County.

Water Recovery Effort



EPA's water response effort began with the formation of the Flint Safe Drinking Water Task Force in October of 2015. The Task Force was created to provide technical assistance to MDEQ and the City of Flint before and after the connection of the Flint water system to a new source of drinking water and to optimize corrosion control measures for the City of Flint. The Task force has focused on Flint's lead service line replacement efforts, corrosion control and lead sampling results. The Task Force also helps set and achieve milestones towards improvements. Some of these milestones include consecutive sampling, identifying lead service lines, providing as-needed technical support, and evaluating the effectiveness of new corrosion control treatments.

Sampling is a key part of the water response effort. Samples are collected about every two months from Flint homes to evaluate whether or not corrosion control measures are working. The first round of sampling began in January 2016, and the fifth round occurred in November 2016. Sample analysis takes many factors into account, including water usage, changes in flow rate, physical disturbances to lead service lines, and identification of lead sources. EPA provides all results to residents. Corrosion control assessment sampling, lead and corrosion byproduct particle identification sampling, and **chlorine** residual sampling will continue as long as necessary. A sampling team was also established that evaluated filter effectiveness, water quality, rash and medical complaints and assessed hot water tanks.

The water response effort and included testing NSF-certified in-home lead removal filters. The State of Michigan distributed f to remove lead from household water and to make it safe for drinking. The Flint Safe Drinking Water Task Force sampled drinking water in households to test filter effectiveness. The results have shown that filters are effective at even high levels of lead.

The Task Force also is working to identify and replace lead service lines in Flint. The lead action level exceedance for the first half of 2016 Lead and Copper Rule compliance data requires that seven percent of the lead service lines in Flint are replaced by July 1, 2017. EPA reviewed the state and city's lead service line replacement plans and has provided feedback. They are working with contractors to develop a lead service line detection method, and are actively working to keep citizens informed.

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Multi-Agency Cooperation

The following agencies are partners in the response to the Flint water contamination as well as other environmental issues the people of Flint face:

U.S. Department of Health and Human Services - has been designated the lead federal agency responsible for coordinating federal government response and recovery efforts. HHS will identify and mobilize the capabilities of the rest of the federal partners.

Federal Emergency Management Agency

U.S. Environmental Protection Agency

Small Business Administration

U.S. Department of Housing and Urban Development

U.S. Department of Agriculture

U.S. Department of Education

Appendix A

Glossary – Initials -Acronyms

American National Standards Institute. The American National Standards Institute is a non-profit organization that oversees the creation, promulgation and use of thousands of norms and guidelines that directly impact businesses in nearly every sector: from acoustical devices to construction equipment, from dairy and livestock production to energy distribution, and many more. ANSI is also actively engaged in accreditation - assessing the competence of organizations determining conformance to standards. Source: https://ansi.org/about_ansi/overview/overview.aspx

ANSI. See American National Standards Institute.

BRFSS. See Behavioral Risk Factor Surveillance System.

Behavioral Risk Factor Surveillance System. The nation's premier system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. Established in 1984 with 15 states, BRFSS now collects data in all 50 states as well as the District of Columbia and three U.S. territories. BRFSS completes more than 400,000 adult interviews each year, making it the largest continuously conducted health survey system in the world.

Brownfields. With certain legal exclusions and additions, the term "brownfield site" means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands.

CASPER. See Community Assessment for Public Health Emergency Response.

Centers for Disease Control and Prevention. The Centers for Disease Control and Prevention is the nation's leading public health agency, dedicated to saving lives and protecting the health of Americans. CDC helps save lives by responding to emergencies, providing expertise, developing vaccines, and detecting disease outbreaks wherever they arise. We work to strengthen local and state public health departments, and we promote health programs that are proven to work. CDCs scientists collect and analyze data to determine how threats to health affect specific populations. Our work has protected people from hundreds of public health threats every year. In the past 2 years, CDC conducted more than 750 field investigations in 49 states, 5 U.S. territories, and in at least 35 different countries. We find out what has made people sick and determine if others have been exposed.

Community Assessment for Public Health Emergency Response. The Community Assessment for Public Health Emergency Response, or CASPER, is an epidemiologic technique designed to provide quickly and at low-cost household based information about a community. The Division of Environmental Hazards and Health Effects at the CDC has developed the CASPER toolkit to assist personnel from any local, state, regional, or federal office in conducting a rapid needs assessment to determine the health status, basic needs, or knowledge, attitudes, and practices of a community. CASPER methodology has been used to assess public health perceptions, estimate needs of a community, assist in planning for emergency response, and as part of the public health accreditation process.

CDC. See Centers for Disease Control and Prevention.

Chlorine. Chlorine is a gas with a very irritating odor. It is used in the production of thousands of products. It is also used for water disinfection, although the chlorine itself is quickly transformed into other chemicals at the beginning of the process. Exposure to low levels of chlorine gas can result in nose, throat and eye irritation. At higher levels, breathing chlorine gas may result in changes in breathing rate and coughing, and damage to the lungs. More information can be found in the fact sheet in Appendix D and on the following website: www.atsdr.cdc.gov/toxfaqs/tfacts172.pdf

CIC. See Community Involvement Coordinator.

CIP. See Community Involvement Plan.

Cleanup. Actions taken to deal with a release or threat of release of a hazardous substance that could affect humans and/or the environment. The term "cleanup" is sometimes used interchangeably with the terms "remedial action," "remediation," "removal action," "response action," or "corrective action."

Clean Water State Revolving Fund. The Clean Water State Revolving Fund, or CWSRF, program is a federal-state partnership that provides communities a permanent, independent source of low-cost financing for a wide range of water quality infrastructure projects.

Community. An interacting population of various types of individuals, or species, in a common location; a neighborhood or specific area where people live.

Community Engagement. The process of involving communities in activities in their communities. Communities are asked to provide input on how the activities will be conducted and how it may affect community plans and goals. See also Community Involvement.

Community Involvement. The term used by EPA to identify its process for engaging in dialogue and collaboration with communities to address the needs of a community. EPA's community involvement approach is founded in the belief that people have a right to know what the Agency is doing in their community and to have a say in it. Its purpose is to give people the opportunity to become involved in the Agency's activities and to help shape the decisions that are made.

Community Involvement Coordinator. The EPA official whose lead responsibility is to involve and inform the public about response actions in accordance with the interactive community involvement requirements set forth in the National Oil and Hazardous Substances Pollution Contingency Plan.

Community Involvement Plan. A plan that outlines specific community involvement activities that occur in a community. The CIP outlines how EPA will keep the public informed of response activities and the ways in which residents can become involved in those activities. The CIP may be modified as necessary to respond to changes in community concerns, information needs and activities.

Contaminant(s). Any physical, chemical, biological or radiological substance or matter that has an adverse effect on air, water or soil.

Contamination. Introduction into water, air and soil of microorganisms, chemicals, toxic substances, wastes or wastewater in a concentration that makes the medium unfit for its next intended use. Also applies to surfaces of objects, buildings and various household use products.

CWSRF. See Clean Water State Revolving Fund.

Drinking Water State Revolving Fund. The Drinking Water State Revolving Fund, or DWSRF, program is a federal-state partnership to help ensure safe drinking water. Created by the 1996 Amendments to the Safe Drinking Water Act, or SDWA, the program provides financial support to water systems and to state safe water programs.

DWSRF. See Drinking Water State Revolving Loan Fund.

Hazardous Substance. Any material that poses a threat to human health and/or the environment. Typical hazardous substances are toxic, corrosive, ignitable, explosive or chemically reactive. Any substance designated by EPA to be reported if a designated quantity of the substance is spilled in the waters of the United States or is otherwise released into the environment.

Lead. Lead is a naturally occurring bluish-gray metal found in small amounts in the earth's crust. Lead can be found in all parts of our environment. Much of it comes from human activities including burning fossil fuels, mining, and manufacturing. Lead has many different uses. It is used in the production of batteries, ammunition, metal products (solder and pipes), and devices to shield X-rays. Because of health concerns, lead from paints and ceramic products, caulking, and pipe solder has been dramatically reduced in recent years. The use of lead as an additive to gasoline was banned in 1996 in the United States. Exposure to lead can happen from breathing workplace air or dust, eating contaminated foods, or drinking contaminated water. Children can be exposed from eating lead-based paint chips or playing in contaminated soil. Lead can damage the nervous system, kidneys, and reproductive system. More information can be found in the fact sheet in Appendix D and on the following website: www.atsdr.cdc.gov/toxfaqs/tfacts13.pdf.

Leaching. The process by which liquid trickles through waste and carries away components that have dissolved in the waste.

Lead and Copper Rule. Lead and copper enter drinking water primarily through plumbing materials. Exposure to lead and copper may cause health problems ranging from stomach distress to brain damage. In 1991, EPA published a regulation to control lead and copper in drinking water. This regulation is known as the Lead and Copper Rule (also referred to as the LCR). The treatment technique for the rule requires systems to monitor drinking water at customer taps. If lead concentrations exceed an action level of 15 ppb or copper concentrations exceed an action level of 1.3 ppm in more than 10 percent of customer taps sampled, the system must undertake a number of additional actions to control corrosion. If the action level for lead is exceeded, the system must also inform the public about steps they should take to protect their health and may have to replace lead service lines under their control.

Legionella. Legionellosis is a respiratory disease caused by *Legionella* bacteria. Sometimes the bacteria cause a serious type of pneumonia (lung infection) called Legionnaires' disease. The bacteria can also cause a less serious infection called Pontiac fever that has symptoms similar to a mild case of the flu.

National Drinking Water Advisory Council. The National Drinking Water Advisory Council, or NDWAC, is a federal advisory committee that supports EPA in performing its duties and responsibilities related to the national drinking water program. The council was created through a provision in the Safe Drinking Water Act of 1974. There are 15 members and two technical advisors on the NDWAC. All meetings are open to the public.

National Primary Drinking Water Regulations. National primary drinking water regulations are legally enforceable standards that apply to public water systems.

NDWAC. See National Drinking Water Advisory Council.

NPDWRs. See National Primary Drinking Water Regulations.

NSF. See NSF International.

NSF International. NSF International, is an independent, accredited organization that develops standards, and tests and certifies products and systems. Source: http://www.nsf.org/about-nsf.

Orthophosphate. A chemical compound used to coat the water pipes to keep them from corroding and releasing lead into the water.

Parts Per Billion. A unit of measurement used in measuring the concentration of contaminants in air, soil or water. One part per billion could be compared to one second in 32 years.

Parts Per Million. A unit of measurement used in measuring the concentration of contaminants in air, soil or water. One part per million could be compared to one minute in two years.

PPB. See Parts Per Billion.

PPM. See Parts Per Million.

Public Meeting. Formal public sessions that are characterized by a presentation to the public followed by a question-and-answer session. Formal public meetings may involve the use of a court reporter and the issuance of transcripts. Formal public meetings are required only for the proposed plan and Record of Decision amendments.

Public. The community or people in general or a part or section of the community grouped because of a common interest or activity.

Safe Drinking Water Act. The Safe Drinking Water Act, or SDWA, is the federal law that protects public drinking water supplies throughout the nation. Under the SDWA, EPA sets standards for drinking water quality and, with its partners, implements various technical and financial programs to ensure drinking water safety.

SDWA. See Safe Drinking Water Act.

TDS. See Total Dissolved Solids.

Total Dissolved Solids. Total dissolved solids are minerals, salts, metals or organic materials that are dissolved in water.

UC. See Unified Command.

Unified Command. The Unified Command is a structure that brings together all major organizations involved in the incident in order to coordinate an effective response, while at the same time allowing each to carry out their own jurisdictional, legal, and functional responsibilities.

Appendix B

Public Meeting Locations

Possible Meeting Locations

Flint City Hall
Dome Auditorium
1101 S. Saginaw St.
Flint, MI
810-766-7346 ext 2025

Flint Public Library
1026 E. Kearsley St.
Flint, MI 48503
810-232-7111

UM-Flint Event and Building Services
303 E. Kearsley St.
Flint, MI 48503
810-762-3436

Flint Cultural Center
1525 Dakota Ave.
Flint, MI 48506
810-238-7185

Appendix C

List of Contacts (Information is current as of October 2016)

U.S. Environmental Protection Agency Officials

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Diane Russell
Community Involvement Coordinator
Superfund Division
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Rebecca Geyer
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EPA
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geyer.rebecca@epa.gov

Flint Safe Drinking Water Task Force Members

Bob Kaplan (Chair), Region 5 Acting Regional Administrator
Miguel Del Toral, Region 5 Ground Water Drinking Water Branch Regulations Manager
Darren Lytle, Office of Research and Development Scientist
Michael Schock, Office of Research and Development Scientist
Jeff Kempic, Office of Water Lead and Copper Rule Technical Lead
Tim Henry, Region 5 Water Division Deputy Director
Tom Poy, Region 5 Ground Water Drinking Water Branch Chief

Federal Elected Officials

Gary Peters
Senator

724 Hart Senate Office Building
Washington, DC 20510
202-224-6221
https://www.peters.senate.gov/contact/email-gary

Lansing Office
124 West Allegan St.
Suite 1810
Lansing, MI 48933
517-377-1508

Debbie Stabenow
Senator
731 Hart Senate Office Building
Washington, DC 20510
202-224-4822
https://www.stabenow.senate.gov/contact

Flint Office
432 N. Saginaw St.
Suite 301
Flint, MI 48502
810-720-4172

Fifth Congressional District Office/ Daniel Kildee
U.S. Representative
227 Cannon House Office Building
Washington, DC 20515
202-225-3611
http://dankildee.house.gov/contact/email-me/

Flint District Office
111 East Court St. #3B
Flint, MI 48502
810-238-8627

State Elected Officials

Rick Snyder
Governor
P.O. Box 30013
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517-373-3400
http://www.michigan.gov/snyder/0,4668,7-277-57827-267869--,00.html

Jim Ananich

State Senator
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http://senatedems.com/ananich/contact/

Sheldon Neely (District 34)
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http://housedems.com/contact-rep-neeley

Pam Faris (District 48)
State Representative
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PamFaris@house.mi.gov
http://housedems.com/contact-rep-faris

Phil Phelps (District 49)
State Representative
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Lansing, MI 48909
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PhilPhelps@house.mi.gov
http://housedems.com/contact-rep-phelps

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Commissioner, District 2
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John W. Northrup
Commissioner, District 4
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810-762-7336

Interested Parties

AARP Foundation SCSEP
Adventist Community Services
African American Baptist Mission Collaborative
Alpha Kids Montessori
American Red Cross
Arab American and Chaldean Council
Arab American Heritage Council
Ascension Health
Avance Communications
Bethel United Methodist Church

Bottles for Babies
Boys and Girls Club – Flint
C.S. Mott Foundation
Catholic Charities of Shiawassee and Genesee Counties
Center for Civil Justice – Michigan
Center for Disease Control
Center for Disease Control/ATSDR
Center for Disease Control/MDHHS
Centro Multicultural La Familia
Church of Jesus Christ of Latter Day Saints
City of Flint Water Plant
CMS Energy
Communication Access Center
Communities First, Inc.
Community Foundation of Greater Flint
Community Resolution Center
Concerned Pastors for Social Action
Consulate of Mexico
Crim Fitness Foundation
Crossing Water
Eldercare Senior Placement
Eternal Life Ministries
European Company Lawyers Association
Fair Food Network
Fairhaven SDA Church
Faith in Texas
Family Service Agency of Mid-Michigan
Farmworkers Legal Services
Federal Emergency Management Agency
Feeding America
Firecracker Marketing
First Presbyterian Church of Flint
Flint & Genesee Chamber
Flint Community Schools
Flint H2O
Flint Jewish Federation
Flint Neighbors United Neighborhood Engagement Hub
Food Bank of Eastern Michigan
Genesee County Catholic Schools
Genesee County Community Action Resource Department
Genesee County Health Department
Genesee County Hispanic Latino Collective
Genesee County Hispanic/Latino Collaborative

Genesee County Medical Society
Genesee Habitat for Humanity
Genesee Health Plan
Genesee Health System
Genesee Intermediate School District
Genesee Intermediate School District
Genesys Regional Medical Center
Good360
Grace Transformational Ministries
Grand Valley State University
Greater Flint Health Coalition
GST MI Works
Hamilton Community Health Network
Hispanic Center
Hispanic Center of Western Michigan
Hope Network
Hurley Medical Center
Hurley Medical Center
Independent Flint Church of Brethren
Islamic Relief USA
Jewish Community Services
Kalamazoo Islamic Society
Kettering University
Latin Americans for Social and Economic Development
Latinos United for Flint
Legal Services of Eastern Michigan
Legal Services of South Central Michigan
Life for Relief and Development
Lions Club International
Lott Carey Foundation
Mass Transit Authority – Flint
Mayor Weaver's Office/City of Flint
McClaren Physicians Group
Mer-Wil Industries
Metro Community Development
Michigan 2-1-1
Michigan Alliance for Families
Michigan Charitable Gaming Association
Michigan Coalition for Immigrant and Refugee Rights Center
Michigan Department of Civil Rights
Michigan Department of Emergency Preparedness & Response
Michigan Faith in Action

Michigan Foundations
Michigan Habitat for Humanity
Michigan Immigrant
Michigan National Guard
Michigan Southern Baptist DR
Michigan State Police
Michigan State University
Michigan State University CCED
Michigan State University Extension
Michigan VOAD
Mott Children's Health Center
Mott Community College
Mt. Calvary Baptist Church
National Association for the Advancement of Colored People
National Association of Social Workers Michigan
National Association of Yemeni Americans
National Women's Foundation
NC Church of Christ
North American Mission Board
NOW Ministries
One Love Global
Opportunities for Learning/Musical Instruments 'N Kids Hands
Orchard's Children Services
Our Community Our Voices
Our Lady of Guadalupe Catholic Church
Pakistani Women's Association of Michigan
PICO California
Points of Light
Powers Catholic High School
Prince of Peace Missionary Baptist Church
QMP, Inc.
Region 3 Healthcare
Rotary Club of Flint
Ruth Mott Foundation
Salem Lutheran Church
Salvation Army
Samaritas
Save the Children
Second Chance Church
Security Credit Union
South Parks N.A.
Southeast Michigan Synod

St. Vincent de Paul Disaster Services
Stonecrest Center
Team General Motors Cares
Team Rubicon USA
Telamon
Telamon Corporation
The Disability Network
The United States Social Security Administration
U.S. Department of Agriculture Food and Nutrition Service
U.S. Department of Health and Human Services
U.S. Department of Housing and Urban Development
U.S. Department of Veterans Affairs
U.S. Food and Drug Administration
U.S. Health Resources and Services Administration
Unitarian Universalist Congregation of Flint
United Way
Universal Kidney Foundation
University of Michigan
University of Michigan – Flint
University of Michigan- Flint Outreach
University of Michigan- Flint Public Health
URAC
Urban Transformation
Utility Workers Union of America
Valley Area Agency on Aging
Volunteer Now
Wayne University
Whaley Children's Center
Woodside Church

Newspapers or Magazines

The Flint Journal
540 Saginaw St.
Suite 101
Flint, MI 48502
810-766-6280
http://www.mlive.com/flint

Publishes Thursdays, Fridays, and Sundays

The East Village Magazine
720 E. Second St.
Flint, MI 48503
810-233-7469
http://www.eastvillagemagazine.org
Publishes the second Saturday of every month

Detroit Free Press
160 W. Fort St.
Detroit, MI 48226
312-222-6400
http://www.freep.com
Publishes Thursday, Friday, and Sunday

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ABC12news@abc12.com

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Flint, MI 48504

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Appendix D

Fact Sheets on lead, chlorine and Flint-specific issues

Lead – ToxFAQs™

CAS # 7439-92-1

This fact sheet answers the most frequently asked health questions (FAQs) about lead. For more information, call the CDC Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to lead can happen from breathing workplace air or dust, eating contaminated foods, or drinking contaminated water. Children can be exposed from eating lead-based paint chips or playing in contaminated soil. Lead can damage the nervous system, kidneys, and reproductive system. Lead has been found in at least 1,272 of the 1,684 National Priority List (NPL) sites identified by the Environmental Protection Agency (EPA).

What is lead?

Lead is a naturally occurring bluish-gray metal found in small amounts in the earth's crust. Lead can be found in all parts of our environment. Much of it comes from human activities including burning fossil fuels, mining, and manufacturing.

Lead has many different uses. It is used in the production of batteries, ammunition, metal products (solder and pipes), and devices to shield X-rays. Because of health concerns, lead from paints and ceramic products, caulking, and pipe solder has been dramatically reduced in recent years. The use of lead as an additive to gasoline was banned in 1996 in the United States.

What happens to lead when it enters the environment?

- Lead itself does not break down, but lead compounds are changed by sunlight, air, and water.
- When lead is released to the air, it may travel long distances before settling to the ground.
- Once lead falls onto soil, it usually sticks to soil particles.
- Movement of lead from soil into groundwater will depend on the type of lead compound and the characteristics of the soil.

How might I be exposed to lead?

- Eating food or drinking water that contains lead. Water pipes in some older homes may contain lead solder. Lead can leach out into the water.
- Spending time in areas where lead-based paints have been used and are deteriorating. Deteriorating lead paint can contribute to lead dust.
- Working in a job where lead is used or engaging in certain hobbies in which lead is used, such as making stained glass.
- Using health-care products or folk remedies that contain lead.

How can lead affect my health?

The effects of lead are the same whether it enters the body through breathing or swallowing. Lead can affect almost every organ and system in your body. The main target for lead toxicity is the nervous system, both in adults and children. Long-term exposure of adults can result in decreased performance in some tests that measure functions of the nervous system. It may also cause weakness in fingers, wrists, or ankles. Lead exposure also causes small increases in blood pressure, particularly in middle-aged and older people and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults or children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause miscarriage. High-level exposure in men can damage the organs responsible for sperm production.

How likely is lead to cause cancer?

We have no conclusive proof that lead causes cancer in humans. Kidney tumors have developed in rats and mice that had been given large doses of some kind of lead compounds. The Department of Health and Human Services (DHHS) has determined that lead and lead compounds are reasonably anticipated to be human carcinogens and the EPA has determined that lead is a probable human carcinogen. The International Agency for Research on Cancer (IARC) has determined that inorganic lead is probably carcinogenic to humans and that there is insufficient information to determine whether organic lead compounds will cause cancer in humans.

Agency for Toxic Substances and Disease Registry
Division of Toxicology and Human Health Sciences

ATSDR

CS240164-A

Lead

CAS # 7439-92-1

How can lead affect children?

Small children can be exposed by eating lead-based paint chips, chewing on objects painted with lead-based paint, or swallowing house dust or soil that contains lead.

Children are more vulnerable to lead poisoning than adults. A child who swallows large amounts of lead may develop blood anemia, severe stomachache, muscle weakness, and brain damage. If a child swallows smaller amounts of lead, much less severe effects on blood and brain function may occur. Even at much lower levels of exposure, lead can affect a child's mental and physical growth.

Exposure to lead is more dangerous for young and unborn children. Unborn children can be exposed to lead through their mothers. Harmful effects include premature births, smaller babies, decreased mental ability in the infant, learning difficulties, and reduced growth in young children. These effects are more common if the mother or baby was exposed to high levels of lead. Some of these effects may persist beyond childhood.

How can families reduce the risks of exposure to lead?

- Avoid exposure to sources of lead.
- Do not allow children to chew or mouth surfaces that may have been painted with lead-based paint.
- If you have a water lead problem, run or flush water that has been standing overnight before drinking or cooking with it.
- Some types of paints and pigments that are used as make-up or hair coloring contain lead. Keep these kinds of products away from children.
- If your home contains lead-based paint or you live in an area contaminated with lead, wash children's hands and faces often to remove lead dusts and soil, and regularly clean the house of dust and tracked in soil.

Is there a medical test to determine whether I've been exposed to lead?

A blood test is available to measure the amount of lead in your blood and to estimate the amount of your recent exposure to lead. Blood tests are commonly used to screen children for lead poisoning. Lead in teeth or bones can be measured by X-ray techniques, but these methods are not widely available. Exposure to lead also can be evaluated by measuring erythrocyte protoporphyrin (EP) in blood samples. EP is a part of red blood cells known to increase when the amount of lead in the blood is high. However, the EP level is not sensitive enough to identify children with elevated blood lead levels below about 25 micrograms per deciliter (µg/dL). These tests usually require special analytical equipment that is not available in a doctor's office. However, your doctor can draw blood samples and send them to appropriate laboratories for analysis.

Has the federal government made recommendations to protect human health?

The Centers for Disease Control and Prevention (CDC) recommends that states test children at ages 1 and 2 years. Children should be tested at ages 3–6 years if they have never been tested for lead, if they receive services from public assistance programs for the poor such as Medicaid or the Supplemental Food Program for Women, Infants, and Children, if they live in a building or frequently visit a house built before 1950, if they visit a home (house or apartment) built before 1978 that has been recently remodeled, and/or if they have a brother, sister, or playmate who has had lead poisoning. CDC has updated its recommendations on children's blood lead levels. Experts now use an upper reference level value of 97.5% of the population distribution for children's blood lead. In 2012-2015, the value to identify children with blood lead levels that are much higher than most children have, is 5 micrograms per deciliter (µg/dL). EPA limits lead in drinking water to 15 µg per liter.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 2007. Toxicological Profile for lead (Update). Atlanta, GA: U.S. Department of Public Health and Human Services, Public Health Service.

Where can I get more information?

For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Human Health Sciences, 1600 Clifton Road NE, Mailstop F-57, Atlanta, GA 30329-4027.

Phone: 1-800-232-4636.

ToxFAQs™ Internet address via WWW is http://www.atsdr.cdc.gov/toxfaqs/index.asp.

ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

Chlorine - ToxFAQs™

CAS # 7782-50-5

This fact sheet answers the most frequently asked health questions (FAQs) about chlorine. For more information, call the CDC Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Chlorine gas is not usually detected in the environment. Exposure to chlorine can occur following an accident, such as a leak or spill from a chlorine tank or the improper use of swimming pool chemicals. Exposure to low levels of chlorine gas can result in nose, throat and eye irritation. Chlorine gas is too reactive to be detected in environmental media at hazardous waste sites. Any chlorine gas released at these sites would be quickly converted to other substances.

What is chlorine?

Chlorine is a gas with a very irritating odor. It is used in the production of thousands of products. It is also used for water disinfection, although the chlorine itself is quickly transformed into other chemicals at the beginning of the process.

A common misconception is that elemental chlorine (Cl_2) is present in chlorinated water. During water chlorination, elemental chlorine gas may be added to the water at first; however, the chlorine is quickly transformed into other chemicals, which actually disinfect the water. Hypochlorous acid and sodium hypochlorite are two of these chemicals that disinfect the water.

The term "free chlorine" in drinking water usually refers to the amount of hypochlorous acid and hypochlorite in the water. It is important to recognize that these compounds are different from molecular chlorine even though the terminology is often used interchangeably.

What happens to chlorine when it enters the environment?

- Chlorine is very unstable and reacts with a variety of chemicals and water when it is released into the environment.
- Chlorine is broken down by sunlight within a matter of several minutes.
- Chlorine dissolves in water and is converted into chloride and hypochlorous acid.
- If chlorine is spilled into water or onto soil or if it is released from a tank into the air, the chlorine will evaporate very quickly forming a greenish-yellow cloud that is heavier than air and can be carried by the wind several miles from the source.

How might I be exposed to chlorine?

- Because chlorine is so reactive, it is not normally detected in the environment except for very low levels in the air above seawater.
- You may be exposed through breathing, skin contact, and eye contact if an accident involving chlorine takes place nearby, such as a liquid chlorine spill, a leak from a chlorine tank, or a leak from a facility that produces or uses chlorine.
- You may also be exposed to chlorine if you mix household chemicals such as toilet cleaner with bleach. Mixing household cleaners containing ammonia with bleach may also release dangerous chemicals into the air.
- You may be exposed to chlorine gas through the improper use of swimming pool chemicals.
- People who work in places where chlorine is made or used may be exposed to low levels over a period of time.

How can chlorine affect my health?

Exposure to low levels of chlorine can result in nose, throat, and eye irritation. At higher levels, breathing chlorine gas may result in changes in breathing rate and coughing, and damage to the lungs.

Agency for Toxic Substances and Disease Registry
Division of Toxicology and Human Health Sciences
ATSDR
CS288958-A

Chlorine

CAS # 7782-50-5

In general, people who suffer from respiratory conditions such as allergies or hay fever, or who are heavy smokers, tend to experience more severe effects than healthy subjects or nonsmokers.

Drinking small amounts of hypochlorite solution (less than a cup) can produce irritation of the esophagus. Drinking concentrated hypochlorite solution can produce severe damage to the upper digestive tract and even death. These effects are most likely caused by the caustic nature of the hypochlorite solution and not from exposure to molecular chlorine.

Spilling hypochlorite solution on the skin can produce irritation. The severity of the effects depends on the concentration of sodium hypochlorite in the bleach.

How likely is chlorine to cause cancer?

The Department of Health and Human Services (DHHS) the International Agency for Research on Cancer (IARC), and the Environmental Protection Agency (EPA) have not classified chlorine as to its human carcinogenicity.

How can chlorine affect children?

Short-term exposures (minutes) to high concentrations of chlorine affect children in the same manner they affect adults, but children may be more sensitive. We do not know what the effects could be in children following longer-term, low-level exposure to chlorine gas or hypochlorite solution.

We do not know whether exposure to chlorine gas during pregnancy can result in damage to unborn babies because there are no studies of pregnant women or pregnant animals exposed to chlorine gas.

How can families reduce the risks of exposure to chlorine?

- Do not mix bleach with other household cleaners such as toilet cleaners because chlorine gas can be released to the air. Do not mix bleach with household cleaners containing ammonia because dangerous chemicals can be released to the air.
- Always store household chemicals in their original labeled containers out of reach of young children to prevent accidental poisonings. Never store household chemicals in containers children would find attractive to eat or drink from, such as old soda bottles.
- Chlorine gas can also be released to the air when chemicals used to chlorinate swimming pools are mishandled. If you have a swimming pool at home, read the labels of the chlorination products carefully and do not let children play with these products.

Is there a medical test to determine whether I've been exposed to chlorine?

There are no medical tests to determine whether you have been exposed specifically to chlorine.

Chlorine is transformed in the body into chloride ions, which are normal components of the body. An enormous amount of chlorine has to be inhaled or ingested in order to detect a significant increase in chloride ions in the blood.

Has the federal government made recommendations to protect human health?

EPA established an environmental air limit of 0.5 ppm. Exposure to higher levels could result in discomfort and irritation. Dependent on the concentration, these effects may be reversible when exposure ends.

OSHA set a legal limit of 1 ppm chlorine in air as a ceiling limit. At no time should a worker's exposure exceed this limit.

EPA established a maximum contaminant level (MCL) andmaximum residual disinfectant level (MRDL) of 4 mg/L for free chlorine in drinking water.

References

Agency for Toxic Substances and Disease Registry (ATSDR) 2007. Toxicological Profile for Chlorine (Draft for Public Comment). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information?

For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Human Health Sciences, 1600 Clifton Road NE, Mailstop F-57, Atlanta, GA 30329-4027.

Phone: 1-800-232-4636

ToxFAQs™ Internet address via WWW is http://www.atsdr.cdc.gov/toxfaqs/index.asp.

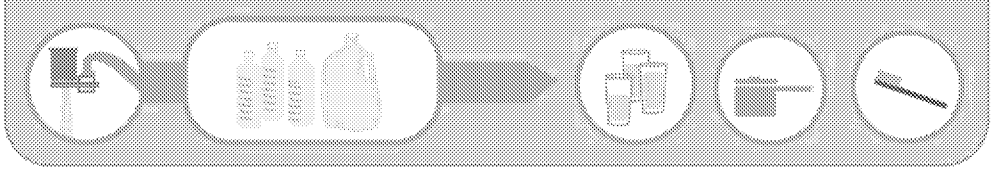
ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

EPA Updates on Flint Water Safety & Steps You Can Take

October 2015

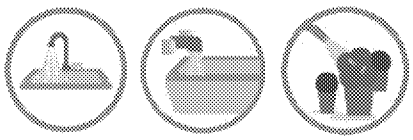
What water is safe to use?

Flint residents should continue to use filtered or bottled water for drinking, cooking and brushing teeth. Make sure your filter is properly certified and installed.



What else can I do?

Every time you run your water - whether from your faucet, your bathtub or even your hose - you are helping improve the condition of the pipes in your home.

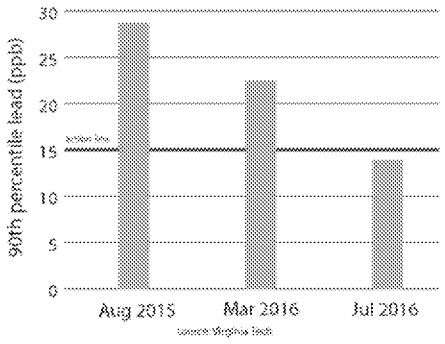


Running your water for a few minutes every day is especially important if construction is happening in your area.

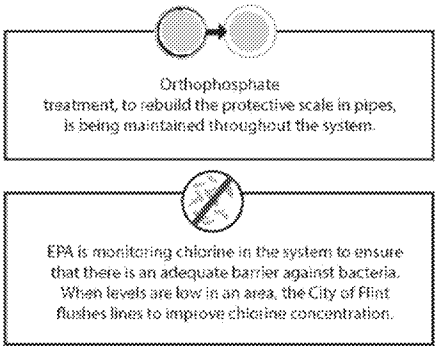
For more information: www.epa.gov/flint

Flint Drinking Water System Status

Lead levels in Flint's drinking water system continue to improve, as shown in the graph below. Sampling data also shows a difference in lead levels from home to home, meaning further review is necessary through the end of the calendar year. Experts believe that low water use in some homes and disturbances (from construction, pipe replacement, etc.) are the primary cause of some higher lead levels. EPA sampling will continue for the next several months.



EPA funded Virginia Tech to sample homes in Flint. Overall lead levels are improving. As of September, 95% of samples are at or below the action level of 15 parts per billion (ppb) for lead.



*Regular water use by residents and businesses will improve orthophosphate and chlorine levels and overall water quality in the system.

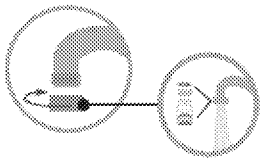
EPA United States Environmental Protection Agency

Properly Used Filters Protect Flint Residents from Lead in Water

epa.gov/flint August 1, 2016

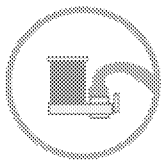
Installing Your Filter & Replacement Cartridges

STEP 1:
Remove aerator from faucet.

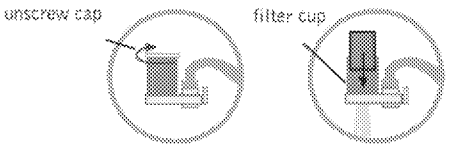


STEP 2:
Determine if you need an adaptor. Some faucet mounted base units require an adaptor. See filter manual for more details.

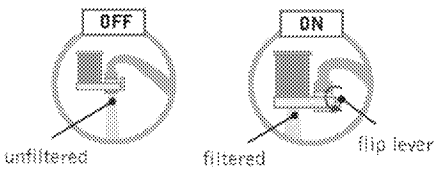
STEP 3:
Attach the base system to the faucet. To attach, some units are twist-on and some are snap-on.



STEP 4:
Insert filter cartridge (or replacement) into filter cup.



STEP 5:
Run cold water through the filter for 5 minutes to flush and activate the cartridge.



Look for the NSF/ANSI 53 Certification Mark to reduce lead.

The U.S. EPA does not endorse NSF International, its products, services, or any product or service that displays the NSF International mark. U.S. EPA does not certify the product. U.S. EPA is aware that the certification mark belongs to an independent organization that certifies these products, and that there are other third-party testing services including UL and WQA.

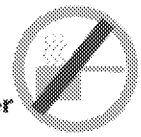
Pick up filters: flintcares.com/pods or call: 211

[PAGE * MERGEFORMAT]

Using Filters

- **DO check if it is NSF Certified to remove lead.**
- **DO run only cold water through the filter.**
- **DO drink & brush teeth with filtered water.**
- **DO check indicator often.**

Remember:



- **DON'T cook with unfiltered water.**
- **DON'T run hot water through the filter.**
- **Boiling Water DOES NOT Remove Lead**

Pick up filters: flintcares.com/pods
or call: 211

Read the report on filter effectiveness at
https://www.epa.gov/flint/filter-study

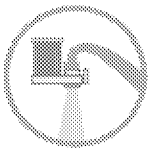
Change replaceable cartridge when indicator* turns red (●).

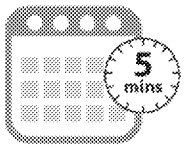
- ● green=cartridge working
- ● yellow=change cartridge soon
- ● red=change cartridge now

* Indicators will vary. See your filter manual.

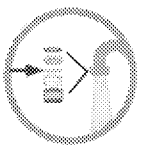
What else should I do?

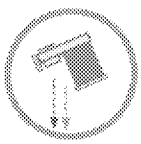
Every morning
Run unfiltered cold water for at least 5 minutes to flush the pipes.





Every week
Clean the aerators in all faucets and clean the screens in your water filters.





remove filter unit, turn up-side-down and gently tap out any debris after use

Flush for Flint

Take These Steps to Flush Pipes and Aid in Flint Water System Recovery

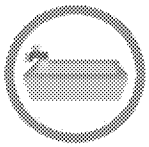
epa.gov/flint #FlushForFlint

Flushing pipes is very important to remove loose lead particles and to coat pipes. Lead line replacement is the long-term goal.

The state will cover this cost.
Residents will receive a credit on their water bill.

Step 1

Run cold water at the highest flow in the bathtub* for 5 minutes.



No showerhead
Flow too low

*If you do not have a bathtub, run cold water at highest flow from a laundry sab or garden hose.

Step 2

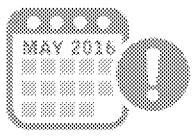
Run cold water at the highest flow from the kitchen faucet for 5 minutes.

Flip lever to bypass filter or remove filter first, then reinstall filter.

Step 3

Do this every day for 14 days in May.

Watch the water draining to avoid overflow of sinks or tubs.



EPA DEQ

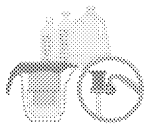
EPA United States Environmental Protection Agency

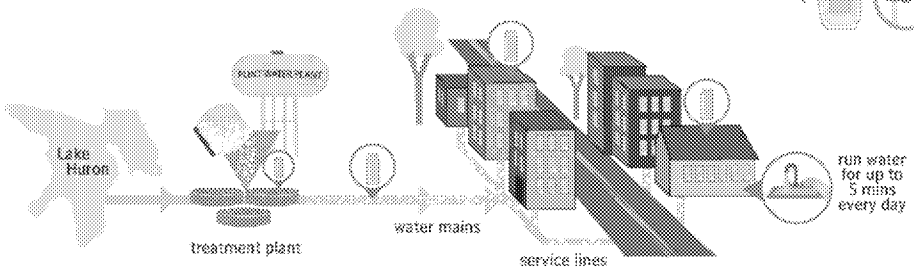
Getting Clean Water to Flint

Where the system is now

March 12, 2016

Flint residents are using filtered or bottled water for consumption.



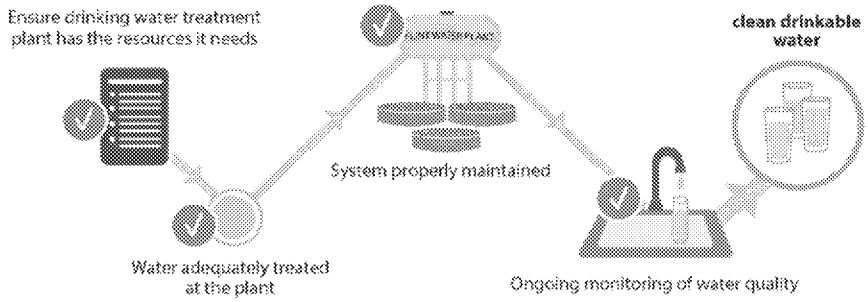


A corrosion inhibitor is added to the water supply to create orthophosphates to help build a protective scale on pipes.

Disinfectant is added to prevent bacterial growth.

Water sampling will help EPA understand and monitor the recovery of the system, disinfection levels and corrosion control effectiveness.

Where it needs to be for system recovery



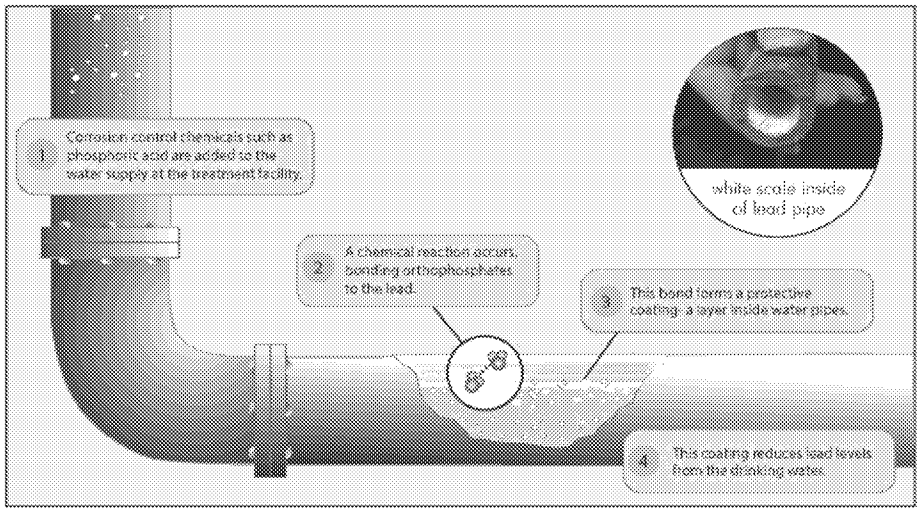
see backside of this sheet for more

Lead in Drinking Water

Lead enters drinking water when pipes and other plumbing components that contain lead corrode. Water utilities use corrosion control strategies to provide a protective coating (containing orthophosphates) in the plumbing.

Due to Flint's recent return to using water from the Great Lakes Water Authority, the protective coating within service lines will build up over time to appropriate levels. EPA is currently collecting samples to determine the effectiveness of the corrosion control measures being taken.

How Do Orthophosphates Coat and Protect Water Pipes?



Important Resources for Flint Residents

Medical Questions

Rashes: You can contact your primary care provider and call 2-1-1

Blood tests: You can contact your primary care provider, or call 810-257-3833

Appearance or odor of your water
Call Flint Water Plant: 810-787-6537

Questions about safe water

- email flintwater@epa.gov
- visit www.epa.gov/Flint
- call EPA's hotline: 810-434-5122

@EPAGreatLakes

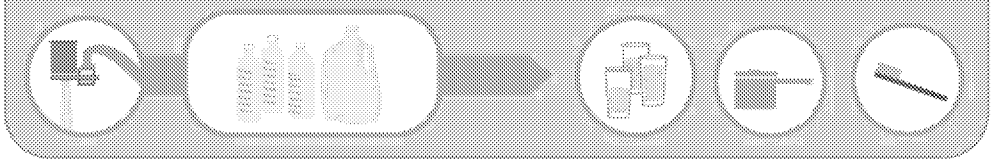
facebook.com/EPAGreatLakes

Novedades sobre la seguridad del agua potable de Flint y las medidas que puede tomar

Octubre de 2015

¿Qué agua es segura para su uso?

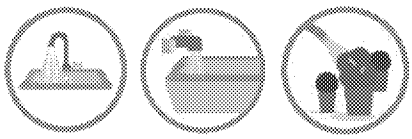
Los residentes de Flint deben seguir utilizando agua filtrada o de botella para beber, cocinar y lavarse los dientes. Asegúrese de que su filtro se encuentra certificado e instalado correctamente.



¿Qué más puedo hacer?

Cada vez que deja correr el agua, ya sea del grifo, la bañera o incluso la manguera, ayuda a mejorar la condición de las tuberías de su casa.

Dejar correr el agua durante unos minutos todos los días es de suma importancia si se está llevando a cabo una construcción en su zona.

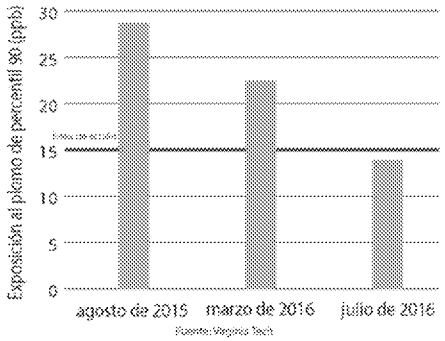


Para obtener más información: www.epa.gov/flint

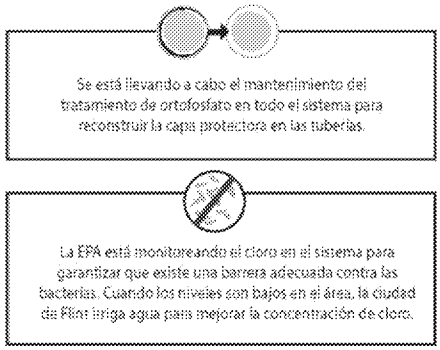
Desarrollado con el Equipo de Ciencias Sociales y del Comportamiento (SBST) conforme al Consejo Nacional de Ciencia y Tecnología

Estado del sistema de agua potable de Flint

Los niveles de plomo en el sistema de agua potable de Flint siguen mejorando, como se muestra en el gráfico debajo. Los datos de muestreo también indican una diferencia en los niveles de plomo entre casa y casa, lo que significa que se necesitan más examinaciones hasta finalizar el año calendario. Los expertos creen que el poco uso del agua en algunos hogares así como las perturbaciones (de construcciones, reemplazo de tuberías, etc.) son la causa principal de algunos niveles altos de plomo. La EPA seguirá tomando muestras por varios meses.



La EPA fundó Virginia Tech para tomar muestras de los hogares en Flint. Los niveles generales de plomo están mejorando. Desde septiembre, el 95 % de las muestras se encuentran en o por debajo del nivel de acción de 15 partes por mil millones (ppb) para el plomo.



*El uso regular del agua por parte de los residentes y empresas mejorará los niveles de ortofosfato y cloro y la calidad del agua general en el sistema.

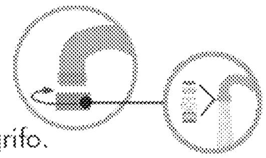
United States Environmental Protection Agency

Residentes de Flint:
Usen los filtros correctamente para protegerse del plomo en el agua

epa.gov/Flint — El 1 de agosto de 2016

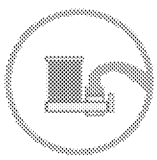
Instale su filtro y cartuchos de repuesto

PASO 1:
Remueva el aireador del grifo.

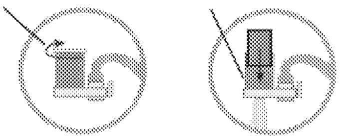


PASO 2:
Verifique si necesita un adaptador. Algunas unidades de base diseñadas para colocarse directamente al grifo requieren un adaptador. Vea el manual del filtro para más detalles.

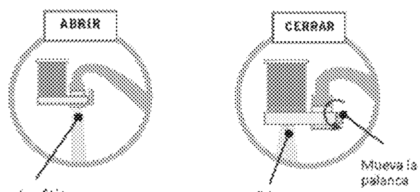
PASO 3:
Fije la base del sistema al grifo. Para fijar, algunas unidades tienen que ser enroscadas y algunas son a presión.



PASO 4:
Introduzca el cartucho del filtro (o el repuesto) a la taza del filtro.



PASO 5:
Deje correr el agua fría a través del filtro por 5 minutos para enjuagar y activar el cartucho.



Busque la marca de certificación 53 NSF/ANSI para reducir el plomo.

La Agencia de Protección Ambiental de EE.UU. (EPA, por sus siglas en inglés) no patrocina la NSF Internacional, sus productos, servicios o cualquier producto o servicio que muestra la marca de NSF Internacional. La EPA no certifica este producto. La EPA está consciente de que la marca de certificación pertenece a una organización independiente que certifica estos productos y que hay otros servicios de muestreo de terceras partes que incluyen UL y WQA.

Lugares para recoger filtros: flintcares.com/pods o llame: 211

Para usar su filtro

La EPA y los CDC realizaron pruebas en los filtros de agua en Flint y encontraron que los filtros certificados por NSF han hecho el agua potable y segura para todos los residentes beber.

- **Primero, verifique que su filtro tenga la marca de certificación 53 NSF/ANSI para reducir el plomo.**
- **DEJE CORRER el agua fría a través del filtro.**
- **Beba y cepillese los dientes co n agua filtrada.**
- **REVISE el indicador frecuentemente.**

Cambie el cartucho de repuesto cuando el indicador esté rojo (●).

● verde=el cartucho está funcionando
● amarillo=el cartucho está pronto por cambiar
● rojo=cambie el cartucho inmediatamente
* Los indicadores variarán. Vea su manual para más detalles.

Recuerde:

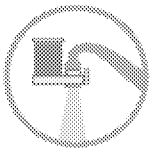
- **No cocine con agua que no esté filtrada.**
- **NO DEJE CORRER el agua caliente por el filtro.**
- **Hervir el agua NO REMUEVE el plomo.**

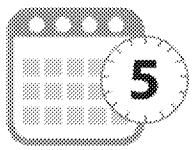
Para recoger los filtros, visite flintcares.com/pods o llame al 211

Lea el informe sobre la eficiencia del filtro https://www.epa.gov/flint/filter-study

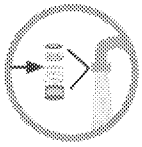
¿Qué más debo hacer?

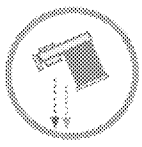
Cada mañana
Deje el agua fría sin filtrar correr por cinco minutos para enjuagar las tuberías.





Cada semana
Limpie los aireadores en todos los grifos y limpie las rejillas en sus filtros de agua.





Remueva la unidad de filtración, gírela hacia abajo y golpee suavemente para que caiga cualquier residuo después del uso.

Deje correr el agua para Flint:

Tome estos pasos para limpiar las tuberías y ayudar en la recuperación del sistema de agua de Flint

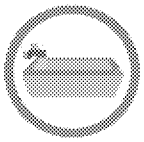
epa.gov/flint #FlushForFlint

Dejar correr el agua por las tuberías es muy importante para remover las partículas sueltas de plomo de los tubos y revestir las tuberías. Reemplazar la línea principal es la meta a largo plazo.

Siga estos pasos por 14 días consecutivos durante el mes de mayo. El Estado va a cubrir este costo. Los residentes recibirán un crédito en su factura del agua.

Paso 1

Deje correr el agua fría a la presión máxima en la bañera* durante 5 minutos.

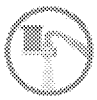


Sin cabezal de la ducha
La presión es muy baja

*Si no tiene una bañera, deje correr el agua fría a la presión máxima desde un lavadero o manguera de jardín.

Paso 2

Deje correr el agua fría a la presión máxima del grifo de la cocina durante 5 minutos.

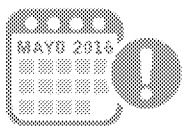


Gire la palanca para desactivar el filtro o remueva el filtro primero, luego vuelva a instalar el filtro.

Paso 3

Hágalo esto todos los días durante 14 días consecutivos.

Vigile el agua mientras esté drenando para evitar que se desborden los fregaderos o bañeras.



EPA

DEQ

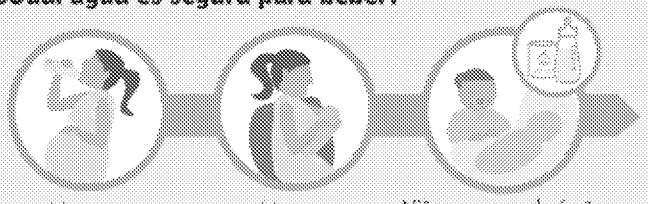
Residentes de Flint:

EPA United States Environmental Protection Agency

Usted y su familia necesitan agua
He aquí una guía de referencia rápida para hacerla segura

El 17 de marzo de 2016

¿Cuál agua es segura para beber?

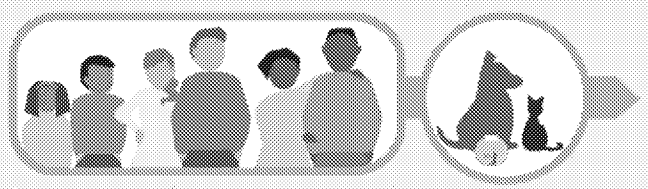


Mujeres embarazadas

Mujeres lactantes

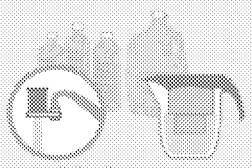
Niños menores de 6 años, incluyendo leche de fórmula para bebés

SOLO agua embotellada



Niños mayores de 6 años, adolescentes y adultos

mascotas



SOLO agua embotellada o filtrada

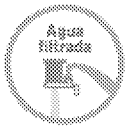
¿Qué agua puedo usar?

SÍ para lavarse las manos y bañarse*

PERO: No deje que entre en su boca ni en la boca de sus hijos

SÍ para lavar los platos

PERO: Use agua filtrada para lavar los biberones de los bebés y vasos de los niños



SÍ para cocinar

SÍ para cepillarse los dientes

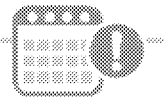
Hervir el agua NO REMUEVE el plomo

***Las erupciones tienen muchas causas, pero no se ha encontrado ningún vínculo médico entre el agua sin filtrar y las erupciones. Si tiene inquietudes, llame a su médico de atención primaria y llame al 2-1-1.**

¿Qué más debo hacer?

Cada mañana
Deje el agua fría sin filtrar correr por cinco minutos para enjuagar las tuberías

Cada semana
Limpie los aireadores en todos los grifos y limpie las rejillas en sus filtros de agua.



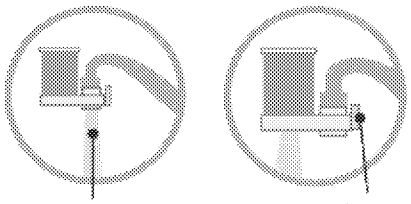
¿Cómo debo usar el filtro?

- Primero, verifique que sea un filtro certificado por NSF para remover el plomo
- Siga el manual que viene con su filtro para instalarlo correctamente.
- No deje correr agua caliente por el filtro.
- Comience con agua fría filtrada y después caliéntela para cocinar.
- Debe limpiar el tanque de su calentador de agua regularmente.

  Siga las instrucciones del fabricante o comuníquese con un profesional certificado para asistencia.

Usted puede dejar correr el agua sin filtrar por el filtro conectado

Mueva la palanca para que el agua filtrada fluya por debajo del cartucho



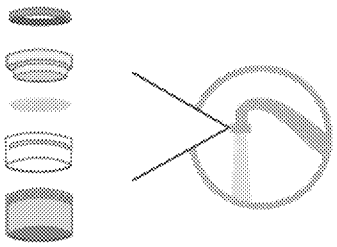
Agua sin filtrar sale del grifo

palanca

Cambie el filtro cuando el indicador se ponga rojo. ◆

Limpie los aireadores semanalmente

1. Desatornille la pieza final en su grifo por donde sale el agua. Eso es el aireador. (Tome nota de cómo quitó las piezas para volver a ensamblarlas. Las piezas podrían variar.)
2. Remueva la rejilla y enjuague cualquier suciedad que se haya acumulado.
3. Vuelva a ensamblarlo y atornillarlo.



Recursos importantes para los residentes de Flint

Preguntas médicas:

Erupciones: Usted puede comunicarse con su médico de atención primaria y llame al 2-1-1

Pruebas de sangre: Usted puede comunicarse con su médico de atención primaria, o llame al 810-257-3833

La apariencia o el olor de su agua

Llame a la Planta de Agua de Flint: 810-787-6537

Preguntas acerca del agua segura

- Envíe un email a flintwater@epa.gov
- Visite www.epa.gov/Flint
- Llame la línea gratuita de: 810-434-5122

@EPAGreatLakes; en español twitter.com@EPAespanol

facebook.com/EPAGreatLakes; en español: Facebook.com/epaespanol

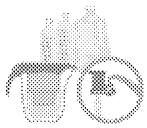
EPA United States Environmental Protection Agency

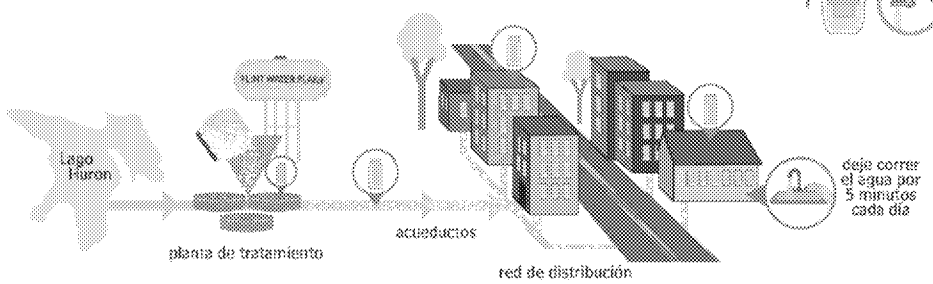
Trayendo agua potable a Flint

Como está el sistema ahora

El 12 de marzo de 2016

Los residentes de Flint están utilizando agua filtrada o embotellada para el consumo.



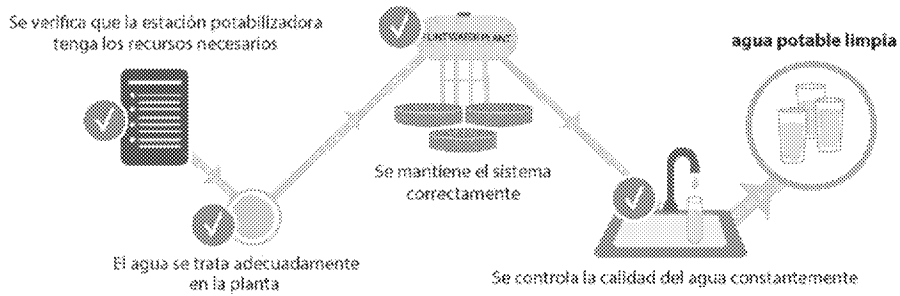


Se añade un anticorrosivo al suministro de agua para crear ortofosfatos que ayuden a construir una capa de protección en las tuberías.

Se añade desinfectante para evitar el crecimiento de bacterias.

El muestreo de agua ayudará a la EPA a entender y supervisar la recuperación del sistema, los niveles de desinfección y la eficacia del control de la corrosión.

Como debe ser el sistema ya recuperado



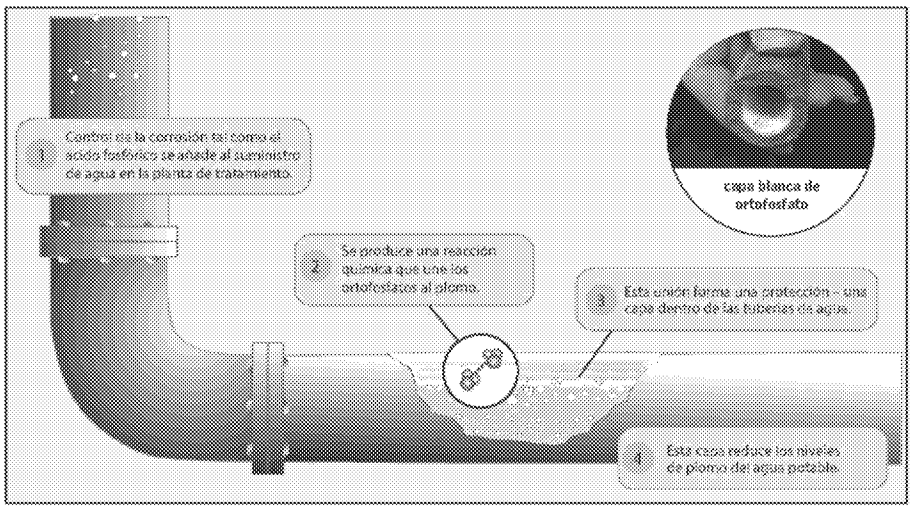
Vea más información al dorso de esta hoja

El plomo en el agua potable

El plomo entra en el agua potable cuando las tuberías y otros componentes de plomería que contienen plomo se corroen. Las empresas de suministro de agua utilizan estrategias de control de la corrosión para proporcionar una capa protectora – que contiene ortofosfatos – en las tuberías.

Debido a que Flint regresó a utilizar agua de la Autoridad de Agua de los Grandes Lagos recientemente, la capa protectora dentro de las líneas de servicio se acumulará con el tiempo hasta llegar a los niveles adecuados. La EPA está recogiendo muestras para determinar la eficacia de las medidas de control de la corrosión que se están realizando.

¿Cómo cubren y protegen los ortofosfatos a las tuberías de agua?



Recursos importantes para los residentes de Flint

Preguntas médicas:

Erupciones: Usted puede comunicarse con su médico de atención primaria y llame al 2-1-1

Pruebas de sangre: Usted puede comunicarse con su médico de atención primaria, o llame al 810-257-3833

La apariencia o el olor de su agua

Llame a la Planta de Agua de Flint: 810-787-6537

Preguntas acerca del agua segura

»Envíe un email a flintwater@epa.gov

»Visite www.epa.gov/Flint

»Llame la línea gratuita de: 810-434-5122

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Appendix F

Federal Support for the Flint Water Crisis Response and Recovery

Federal Support for the Flint Water Crisis Response and Recovery

April 4, 2016

On January 16, 2016, President Barack Obama issued an emergency declaration for the State of Michigan and ordered federal aid to supplement state and local response efforts due to the emergency conditions in Flint, Michigan, affected by contaminated water. The President's action authorized Federal Emergency Management Agency (FEMA) emergency assistance to provide water, water filters, water filter cartridges, water test kits, and other necessary related items for a period of no more than 90 days; assistance with those commodities has been extended through August 14, 2016. Additionally, the President offered assistance in identifying other federal Agency capabilities that could support the recovery effort but do not require an emergency declaration. On January 19, the President designated the U.S. Department of Health and Human Services (HHS) as the lead federal Agency responsible for coordinating federal support for response and recovery efforts in Flint. The lead federal official Dr. Nicole Lurie, the HHS Assistant Secretary for Preparedness and Response (ASPR), is coordinating the efforts of all the federal agencies, including: HHS agencies, FEMA, the Environmental Protection Agency (EPA), the Small Business Administration (SBA), the Department of Agriculture (USDA), and the Department of Housing and Urban Development (HUD). The federal agencies are providing water and filters and water testing and are helping meet needs in health and community outreach.
Federal agencies will continue to offer expertise and technical assistance to state and local agencies for as long as needed to support in the community's recovery and resilience.

Ensuring Access to Safe Water

EPA's sampling results confirmed that the filters being distributed by the state are effective in removing high levels of lead from drinking water. Bottled water is the safest option for vulnerable populations including pregnant women and children under six years old. Everyone else should use filtered water for drinking and cooking. Pets also should drink filtered water. Residents can request bottled water delivery and water testing by calling the 2-1-1 information line.

Distribution of bottled water and filters

Federal officials have worked with state and local partners to improve access to bottled water and water filters. The state emergency operation center reported that 99 percent of residents have taken advantage of bottled water availability and 89 percent of residents have taken advantage of water filter availability.
FEMA has provided over 4.4 million liters of water to the state for distribution, over 50,000 water and pitcher filters, and over 243,000 filter replacement cartridges.
HUD worked with the Flint Housing Commission to ensure 100% installation as well as future upkeep of water filters in every unit of public housing as well as to HUD's federally assisted and HUD-insured properties. In addition, HUD is working with local partners to be sure water is delivered to seniors and disabled residents in public housing.

Protecting Health

Lead blood testing

Experts from the Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR) gathered water and blood lead level data, going back before the water crisis began, to estimate the severity of the problem.
From Oct. 1 through April 1, more than 5,100 of the city's 9,000 children under age 6 have received blood lead level screening.

- USDA temporarily authorized blood lead screening at clinics for participants in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).
- HUD is working with a local provider to offer onsite blood lead testing for children in public housing.

The U.S. Public Health Service Commissioned Corps cleared a backlog of approximately 800 blood lead level screening results and prepared test result notifications for parents and Michigan Department of Health and Human Services (MDHHS).

Rash Investigation

CDC and the Agency for Toxic Substances and Disease Registry experts continue to support the state's investigation of rashes and other skin concerns affecting Flint residents to help identify potential causes. Lead is not known to be a skin irritant.

Services for Children

The Centers for Medicare & Medicaid Services (CMS) expanded Medicaid coverage for children up to age 21 and pregnant women in Flint impacted by lead exposure. Approximately 15,000 additional children and pregnant women are now eligible for Medicaid coverage, and 30,000 current Medicaid beneficiaries in the area are eligible for expanded services. This comprehensive health and developmental coverage includes lead-blood level monitoring, nutritional support, behavioral health services, and targeted case management, among other services.

The Health Resources and Services Administration is providing $500,000 in total funding to help Flint health centers hire more people and provide more lead testing, treatment, outreach, and education.

CDC/ATSDR is embedding staff with Genesee County Health Department to assist with case management enrollment for children with elevated levels. All families whose children have elevated blood lead levels have been encouraged to enroll in case management.

The Administration for Children and Families provided guidance to the state on the Temporary Assistance for Needy Families program, with the goal of helping families in the program access bottled water, gas cards, and bus passes to reach water distribution sites or healthcare facilities.

One-time emergency funding of $3.5 million is helping Head Start grantees expand early childhood education, behavioral health services, health services and nutrition services. Additionally grantees, will:

- Open three additional classrooms beginning March 2016 through June 2017 for children in most affected areas.
- Lengthen the current school year by three weeks.
- Provide Head Start comprehensive services to preschoolers already enrolled in the school's special education program.
- Enroll additional children in the home-based model.

An assistant surgeon general with the U.S. Public Health Service Commissioned Corps worked with the mayor's office as a health advisor to help develop immediate, mid-, and long-term health goals for a community recovery plan and help identify a permanent public health advisor for the city.

Nutrition

Foods rich in calcium, iron and vitamin C can help mitigate lead absorption in children. USDA increased access to these foods for children in Flint by:

- Providing summertime nutrition assistance through a Summer Electronic Benefits Transfer pilot program for Flint children who receive free and reduced-price meals during the school year. Nationwide, the pilot program will provide $26.9 million for summertime nutrition assistance this year. More than 15,000 Flint students will be eligible to receive a $30 benefit package each summer month for nutritious foods to help lead absorption under the Summer Electronic Benefits Transfer pilot program.
- Encouraging all eligible Flint Community Schools and other Flint-area schools to participate in the Community Eligibility Provision, a program that ensures universal access to healthy, school meals.
- Providing an additional $62,700 to help schools purchase fruit and vegetable snacks.
- Offering WIC benefits for ready-to-feed infant formula for eligible infants.
- Supporting program providers, community based organizations, and farmers markets in the Flint community. These groups help distribute information about foods rich in calcium, iron, and vitamin C.

Behavioral Health

HHS behavioral health teams provided basic Psychological First Aid (PFA) skills training to an additional 183 people. They also conducted stress management training with 247 healthcare providers and responders and taught a "Train the Trainers" for 32 local providers to enable them to teach basic PFA training. HHS also sponsored Spanish and English versions of the PFA materials tailored to the Flint Water Crisis to be shared with the community.

HHS facilitated development of a long-term mental health recovery and resilience plan in coordination with Genesee Health Systems and other community partners to help guide the development of a new behavioral health system as the community recovers. This plan will be implemented by the community with technical assistance from the Substance Abuse and Mental Health Services Agency.

Restoring Flint's Water System

EPA is conducting five types of water testing to monitor restoration of the city's water system. Results show the system is recovering.

Diagnostic Lead Sampling

EPA is conducting lead sampling in homes to help determine if lead is coming from the house or the service line. Each sampling team is accompanied by community engagement staff to ensure that residents can ask questions and receive plain-language answers about sampling. EPA has tested over 3,500 samples in more than 500 homes and other properties. These results are available via an interactive map at www.epa.gov/flint.
EPA testing is completed by appointment for residents whose homes have high lead levels based on Michigan Department of Environmental Quality (MDEQ) findings, homes that have known lead service lines, and homes where residents have requested water testing. Residential water testing remains voluntary.

Lead and Copper Rule Sampling

MDEQ is conducting compliance sampling as part of their broader sentinel sampling program. In accordance with the administrative order that EPA issued to MDEQ, EPA reviews compliance sampling plans before they are implemented. EPA may also collect samples at some of these locations to gather more information about the impact of lead in the water.

Testing lead filters in homes

EPA has taken approximately hundreds of samples of drinking water in households with known lead levels of 100 parts per billion or higher to test the effectiveness of filters at removing lead at high concentrations. Filters distributed in response to this water crisis are rated at 150 parts per billion. EPA's sampling results confirm that the filters are effective in removing lead from drinking water at levels higher than 150 parts per billion. As a precaution, bottled water is still considered the safest option for vulnerable populations, including pregnant and breast-feeding women, infants and children under six years old whose water tests higher than 150 parts per billion. Everyone else should use filtered water for drinking and cooking. Pets should also drink filtered water.

Overall water quality testing

EPA is collecting water samples from locations throughout Flint to evaluate the levels of fluoride, other compounds, and pH. As part of this assessment, EPA is analyzing the overall stability of water quality throughout Flint's distribution system.

EPA is also testing to be sure enough chlorine is in the water. Chlorine is used to disinfect drinking water and prevent the growth of bacteria and other pathogens. At locations where chlorine is low, EPA follows up with additional testing for bacteria.

Economic Recovery

The U.S. Department of Labor is providing a National Dislocated Worker Grant for up to $15 million to assist with humanitarian and recovery efforts resulting from the water crisis in Flint. The $7.5 million released initially will provide temporary employment for eligible individuals to assist with recovery work, as well as offer career and training services to help them find permanent work.

Technical assistance to Flint through HUD's Strong Cities, Strong Communities (SC2) program has been extended through 2016. This program focuses on economic development in economically distressed communities, in part by coordinating federal resources.

SBA has provided approximately $400,000 in additional funding through a number of programs including $100,000 in Microloan capital, an additional $100,000 available for training and technical assistance to Flint entrepreneurs, $100,000 increase in existing technical assistance for small businesses in the area and $100,000 in supplemental funding to the

Kettering University SBDC. SBA also approved a state request for low-interest disaster loans for small businesses within the greater Flint area.
The Federal Housing Administration (FHA) determined properties may still qualify for FHA-insured mortgage if the individual water purification system meets all federal, state, and local standards. This will help homebuyers in Flint secure FHA-insured loans.

HUD allowed $325,000 of an existing lead-paint hazard grant for public housing in Flint to be applied to this crisis.
EDA's Economic Development Representative for Michigan is working closely with the mayor to build the city's capacity so that the city can develop a robust plan for economic development in Flint. EDA, working with the mayor and local partners, is exploring additional technical resources that can be brought to the community, such as resilience workshops for businesses.